

JAN - 8 1958

B 688930

VOLUME 41 • NUMBER 230

September 1957

THE LIBRARY OF
CONGRESS
SERIAL RECORD

JAN 24 1958

THE

Bulletin

OF THE NATIONAL ASSOCIATION

OF SECONDARY-SCHOOL PRINCIPALS



Secondary Education
in
Today's World

SERVICE ORGAN FOR AMERICAN SECONDARY SCHOOLS

THE CONTENTS OF THIS BULLETIN ARE LISTED IN "EDUCATION INDEX"

Second-class mail privilege authorized at Washington, D.C., and additional entry at Baltimore, Md.



● Your students' career guide, published on the second and fourth Mondays of each month from September through June.

● Four pages (sometime eight) in each of the twenty issues, filled with accurate, up-to-date information on job opportunities, training requirements, and educational guidance.

Our Editor-in-Chief, DR. MAX F. BAER, as well as our Board of Advisors, consisting of

DR. MARGARET E. BENNETT
MR. JOHN C. DAVIS
DR. MITCHELL DRESSE
DR. CLARENCE W. FAILOR

DR. GERTRUDE FORRESTER
DR. CLIFFORD P. FROELICH
MR. RICHARD JONES
DR. EDWARD C. ROEBER

DR. W. L. SPENCER

have years of experience in vocational guidance.

● Provide your entire school, senior class, or home room with this much needed guidance, and receive the advantage of our quantity subscription discount.

PRICE LIST

"YOUR FUTURE OCCUPATION"

Benjamin Franklin Post Office

P. O. Box 7408

Washington 4, D. C.

		Total Subscriptions	Total Cost Per Year
First Subscription.....	\$12.00	1	\$12.00
(Includes Vinyl Binder)			
Next 5 Subscriptions.....	2.00 each	6	27.00
Next 39 Subscriptions.....	2.00 each	45	105.00
Next 100 Subscriptions.....	1.00 each	145	205.00
Over 145 Subscriptions.....	.85 each		

Quantity prices are based upon our mailing all copies to one address. We will bill you monthly or three times during the year (December 1, March 1, June 1).

Write, telling us how many subscriptions you will need, and we will send you copies for inspection and approval. You are under no obligation by letting us send you these free copies of "Your Future Occupation."

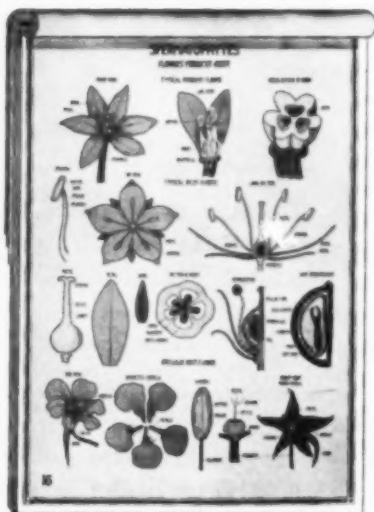




L13
N27

WELCH — SMALLWOOD BIOLOGY CHARTS

60 Charts in Diagrammatic Colors
Each Chart 24 x 36 Inches



30
Botanical
Charts
More than
400 drawings

30
Zoological
Charts
More than
350 drawings

Up-to-date

Self-
Explanatory

No. 6939

Non-Glare — Washable — Protective — Coating

No. 6939—Botanical Charts set of 30 tripod or wall bracket mounting
Per Set \$27.50

No. 6940—Zoological Charts set of 30 tripod or wall bracket mounting
Per Set \$27.50

No. 6941—Biological Charts set of 60—combined set of 30 Botanical and 30 Zoological charts in wall bracket or tripod mounting.....Per Set \$45.00

*Have Your Instructor Write For Complete Booklet On
These and Many Other Fine Welch Teaching Charts*

W. M. WELCH SCIENTIFIC COMPANY

DIVISION OF W. M. WELCH MANUFACTURING COMPANY

Established 1880

1515 Sedgwick Street Dept. G-1 Chicago 10, Ill., U.S.A.

Manufacturers of Scientific Instruments and Laboratory Apparatus

When writing advertisers mention THE BULLETIN

The College Blue Book

THE STANDARD WORK OF REFERENCE
OF HIGHER AND SECONDARY EDUCATION
IN THE UNITED STATES OF AMERICA

IS PUBLISHED REGULARLY EVERY 3 YEARS

(Current Edition - 1956)

Next Edition [Ninth] - 1959



THE EIGHTH EDITION

Lists EVERY Institution of Higher Education in the United States (requiring High School graduation for admission), regardless of membership in an Association, regardless of affiliation, regardless of Accreditation.

YET - accreditation, memberships in Associations, Religious Affiliations, Professional and Honorary Fraternities and Sororities, Work-Study Programs (Co-operative Education), etc., etc., are TABULATED for each named institution (as part of 51 pertinent data).

FURTHERMORE - Every conceivable cross-reference is employed to afford quick location of information, frequently if only one fact is known about the institution.

Educators who have used THE COLLEGE BLUE BOOK say they cannot do without it.

700 pages — 8½ x 11 — cloth binding

PRICE \$12.00

(\$11.00 CASH-WITH-ORDER)

The College Blue Book

P. O. Box 311 Yonkers, N. Y.

The Bulletin

OF THE NATIONAL ASSOCIATION OF Secondary-School Principals

This Association does not necessarily endorse any individual, group, or organization or the opinions, ideas, proposals, or judgments expressed at the annual convention of the Association, and/or published in THE BULLETIN.

TABLE OF CONTENTS

Pacific Regional Junior High School Conferences	v
Approved List of National Contests and Activities for 1957-58	1
Glimpses of the Education Program of the Armed Services .. Ivan A. Booker	9
Measures Utilized in the USSR To Motivate Youth Into Science-Technology Fields .. Eleanor S. Lowman	13
The Two-Year Junior High School .. Ellsworth Tompkins Virginia Roe	27
A Science Career: How the High School Affects the Choice .. Maurice Finkel	45
The Gifted Student in the Composition Class .. Mrs. Ruth Reeves	50
A Good High School Program in French and Spanish .. Imogene Montgomery	61
Trends in Secondary School Foreign Language Teacher Supply and Demand .. G. C. Kettelkamp	67
How an English Language Arts Course of Study Evolved .. Joseph Mersand	75
The Nature and Worth of a Program of Remedial Reading .. Angell Mathewson H. R. Michelson	83
What Does the Future Hold for Literature Teachers? .. Louise Forke	90
Health Service Programs for Secondary Schools ..	92
Mental Health and Material Progress .. H. H. Punke	107
Physically Educating the Slow Learner .. J. H. Jenny	118
Why a Shortage of Mathematics Teachers? .. M. W. Beckmann	122
Recommended Policies and Practices for Student Council Leaders for Safety Education ..	127
High School-College Nights ..	134
Scholarship Awards to Seniors .. L. L. Sheeley	137
The Book Column ..	138
News Notes ..	208

THE CONTENTS OF THIS BULLETIN ARE LISTED IN "EDUCATION INDEX"

Issued Monthly, September to May Inclusive

Copyright 1957 by

THE NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS

PAUL E. ELICKER, Executive Secretary

PAUL E. ELICKER, Editor

WALTER E. HESS, Managing Editor

G. EDWARD DAMON, Assistant Secretary for Business

WALTER E. HESS, Assistant Secretary for Publications

ELLSWORTH TOMPKINS, Assistant Secretary for Administrative Services

GERALD M. VAN POOL, Assistant Secretary for Student Activities

1201 Sixteenth Street, N.W., Washington 6, D. C.

An Invitation

To Principals of Approved Secondary Schools

Does your school have a chapter of the National Honor Society founded by the National Association of Secondary-School Principals in 1921?

If your school does not have a chapter

And

If your school is accredited by one of the regional accrediting associations or if it has the highest rating of your state department of education,

**You are invited to write
for full particulars to:**

Paul E. Elicker, Secretary

National Honor Society

1201 Sixteenth Street, N. W., Washington 6, D. C.

5

484

Pacific Regional Junior High School Conferences

MEMORANDUM: To all junior high-school administrative and professional staff in these states: Arizona, California, Idaho, Nevada, New Mexico, Oregon, Utah, Washington.

REGARDING: Pacific Regional Junior High School Conferences
1. October 11-12, at Berkeley, California
2. October 18-19, at Los Angeles, California
Both sponsored by the California Association of Secondary-School Administrators and the National Association of Secondary-School Principals.

Look over the following programs that have been announced. See what you'll miss, if you don't come. So, say "yes" to our invitation and plan to attend. Share your good ideas and experiences with junior high-school administrators from eight western states. For more information, write Principal Helen Jewett Rogers, General Chairman, Pasteur Junior High School, Los Angeles, California.

Here are the tentative programs:

NORTHERN SECTION—Berkeley, California

Friday, October 11, 1957

9:00 A.M. Coffee and Registration at University of California

9:30 A.M. General Session

General chairman—Dr. Walter Loban

Greetings from the University—Dean Brownell

Greetings from the State Dept.—Earl Sams

Keynote address—James Dierke, Asst. Supt., San Francisco Schools

10:45 A.M. Section Meetings

Topics:

1. Philosophy of the Junior High School

2. Junior High-School Pupils, Their Characteristics and Needs

3. Teachers in Junior High Schools, Their Characteristics and Training

4. Curriculum for Gifted; Average; Slow Learners

5. Buildings and Facilities To Implement the Program

6. Communications Between School, Home, and Community

12:15 P.M. Lunch and orientation for school visitation—Main U. C. Cafeteria

1:30 P.M. Visit junior high schools (Selection made on basis of registrants' requests)

6:00 P.M. Dinner

Chairman—Win Richards

Speaker—"Doc" Hess

8:00 P.M. Opportunity to tour San Francisco night life

Saturday, October 12

- 9:00 A.M. Section Meetings—(See Friday morning)
- 12:00 N Lunch—International House or University Cafeteria
- 1:30 P.M. General Session
- a. Synthesis of morning sessions—Dr. Walter Loban
 - b. Buzz Session—an opportunity to place questions before the group and get answers

SOUTHERN SECTION—Los Angeles, California

Theme: THE JUNIOR HIGH SCHOOL LOOKS AHEAD

Registration: October 17-18, 1957

Los Angeles Board of Education
450 North Grand Avenue, Los Angeles 12

Friday, October 18—Morning and Afternoon

Visit to selected junior high schools in Los Angeles and nearby communities
Transportation provided

Friday Evening:

Dinner—Keynote Speaker
Dr. Howard E. Wilson
Dean of the School of Education
University of California at Los Angeles

Saturday, October 19, 1957

- 9:30—10:30 A.M.
Changing Needs of Industry and the Implications for Junior High Schools
Creativity in a World of Automation
- 10:30—11:00 A.M.
Coffee Breaks
- 11:00 A.M.—12:00 N
The Role of Leadership
Unexplored Area of Human Relations and Implications for Junior High School
- 12:00 N—1:00 P.M.—Lunch
- 1:15 —2:30 P.M.—Section Meetings
- I. Industry
 - II. Creativity
 - III. Leadership
 - IV. Human Relationships

Approved List of National Contests and Activities for 1957-58

Participate only in Approved National Contests and Activities
and assure the profession's continued control

THIS List of Approved National Contests and Activities (all non-athletic) for 1957-58 is published by the Committee on National Contests and Activities¹ of the National Association of Secondary-School Principals as a professional service to all secondary schools. It was prepared after careful study of the many applications received from sponsors in business, industry, government, and the professions.

The Committee has placed on this List only those national contests and activities that meet the high standards of the recommended criteria outlined below.

The Committee believes firmly that the number of approved national contests and activities should be judiciously limited and that the number of essay contests ought to be reduced. (There are four fewer national contests on the Approved List for 1957-58 than for 1956-57.) It earnestly requests the high-school administrator to read carefully the four parts of this announcement—(A) Recommendations for Participation, (B) General Recommendations, (C) Criteria, (D) List of Approved Contests, and (E) List of Approved Activities.

A. RECOMMENDATIONS FOR PARTICIPATING IN NATIONAL CONTESTS AND ACTIVITIES IN SCHOOLS

It Is Recommended:

1. *Policy for All Secondary Schools*

That all secondary schools take a firm and consistent position against participating in unapproved national contests or activities.

2. *School Participation*

- (a) *On a national basis*—That a school confine its participation to those national contests that are currently placed on the Approved List by the Committee on National Contests and Activities for the years indicated.
- (b) *On a state basis*—That schools limit their participation in contests and activities sponsored by their own state high-school organizations within the state in preference to any activities sponsored by other agencies. Many states evaluate

¹The Committee on National Contests and Activities: Albert Willis, *Executive Secretary*, Illinois High School Association, 11 South LaSalle Street, Chicago 3, Illinois, *Chairman*; Robert V. Cresswell, *Principal*, David B. Oliver High School, Pittsburgh, Pennsylvania; O. T. Freeman, *Principal*, Wichita Falls Senior High School, Wichita Falls, Texas; John O. Fry, *Curriculum Adviser of Secondary Schools*, Hamilton, Ohio; R. C. Guy, *Principal*, Hutchinson Senior High School, Hutchinson, Kansas; Raymond S. Locke, *Principal*, Barrington High School, Barrington, Rhode Island.

and approve state-wide or local contests and activities, and approved lists are available from officers of state high-school organizations.

3. *Student Participation*

- (a) That, if a school participates in any contest or activity outside the state, no pupil should be absent from school more than five school days for a single contest or activity.
- (b) That an exception for an individual contestant be made if successive steps are required to determine the winner of a national or regional contest.
- (c) That no high school should enter more than two regional or two national contests per year in which ten or more pupils from that school are involved initially, except scholarship contests.
- (d) That no individual pupil should participate in more than one contest in each of the eight categories on the Approved List except where scholarships are involved.

4. *Essay Contests*

That a school should not participate in more than one essay and forensic contest each semester. (Fewer than five pupils in each school shall not be considered official school participation.) Participating in essay contests is generally regarded as of questionable educational value because it is extremely difficult to guard against plagiarism and dishonest collaboration. Therefore, we make these recommendations:

- (a) Do not promote any essay contest. Announce or post notice of consent *only*.
- (b) A staff member should not judge any essay.
- (c) A staff member should not be obligated to use class periods for directing the developing and writing of any essay, unless it fits into an existing unit of instruction.

B. GENERAL RECOMMENDATIONS

The Committee suggests that all school administrators give consideration to these recommendations:

1. Before a secondary school agrees to participate in any national contest or activity, the principal should check this List to find out whether it is approved. If the contest or activity is not approved, *do not* schedule it in your school.
2. Approval by the Committee on National Contests and Activities does not give the sponsor the right to operate in any school. The school itself will determine the contests and activities in which to take part.
3. Sponsors of essay contests should have all essays read and judged outside the school staff by judges selected by the sponsors.

4. In regard to college scholarships, no sponsor should place any cash award directly in the hands of any boy or girl. The award should be placed with the treasurer of the institution selected by the boy or girl. If the boy or girl fails to attend the institution, the award will then be available for the next qualified applicant.

C. CRITERIA

Used by the National Association of Secondary-School Principals for Placing Contests, Competitions, Festivals, Tournaments, and Other Non-Athletic Activities on the Approved List.

School administrators agree that many contests offered to schools are of doubtful educational value. To help determine which contests or activities are educationally desirable, the Committee on National Contests and Activities has prepared the following Criteria. In applying these Criteria, the Committee aims to select for approval only those contests and activities of highest educational value and greatest potential worth for high-school youth.

1. *Primary Objective*

The first purpose of a national contest or activity is to benefit high-school youth in educational, civic, social, and ethical development.

2. *Types of Contests Preferred*

Contests that make it possible for individual students to work out contributions, solutions, and creations by their own efforts are preferred. Essay contests may invite dishonest collaboration; therefore, they are not considered desirable. Scholarship tests, achievement tests, and contests involving original work by the contestant are preferred.

3. *Purposes*

The contest or activity must be educationally sound, worthy, and timely. It should be stimulating to student and school, and a desirable activity for both.

4. *Values*

- a. The contest or activity should be well planned and have adequate, objective evaluation.
- b. The contest must emphasize a potentiality for good citizenship, high moral standards, and intellectual competence.
- c. The subject of the contest or activity must not be commercial, controversial, sectarian, or concerned with propaganda.

5. *Restrictions*

- a. No contestant may be excluded because of race, color, or creed.
- b. The activity must not place undue burdens on students, teachers, or school.
- c. The student or school should not be required to pay an entry fee or purchase materials to participate.
- d. Teachers should not judge or select contestants in any stage of a contest.

- e. The contest or activity must not require frequent absence of participants from school.
 - f. Ordinarily, out-of-state travel should be limited to one student. Exception may be made if scholarships are substantial.
 - g. Contests or activities should not duplicate those sponsored by other organizations.
 - h. An organization should not conduct more than one national contest or activity in the same school year.
6. *Awards and Prizes*
- a. The contest or activity should be philanthropic.
 - b. Scholarships and educational trips are regarded as the most desirable types of awards.
 - c. Awards and prizes must be adequate in number and amount.
7. *Sponsorship*
- a. The organization sponsoring the contest or activity must be engaged in a creditable or acceptable enterprise regardless of the kind and amount of prizes offered, and must not use the contest or activity as a "front" for advertising a company name or product.

OTHER CONDITIONS AND REQUIREMENTS

1. If participation in a contest or activity is offered to students and schools in five or more states, it will be regarded as a national contest or activity and application for placement on the Approved List should be made to the Committee on National Contests and Activities.
2. If participation is offered to students and schools in only one state or less than five states, separate applications should be directed to the state association of secondary-school principals, or to the state activities association. Names of officers of state secondary-school principals' associations may be secured from the Committee.
3. Participation by any school in any contest or activity on the Approved List is voluntary.
4. Organizations whose contests or activities are placed on the Approved List must include this statement on their publications or applications: "The National Association of Secondary-School Principals has placed this Contest (or this Activity) on the Approved List of National Contests and Activities for 1957-58." Further, they should inform the Committee of the names of the national and state winners of contests or activities as soon as announcements are made to the press.
5. Applications for placing national contests or activities on the Approved List must be filed with the Committee on National Contests and Activities on or before April 1, for consideration for the 1958-59 school year.

D. APPROVED NATIONAL CONTESTS (NON-ATHLETIC)
FOR 1957-58

SPONSORING AGENCY	TYPE OF CONTEST APPROVED	YEARS ON APPROVED LIST	CLOSING DATE OF CONTEST
<i>Agriculture Contests</i>			
Future Farmers of America, Office of Education, U. S. Department of Health, Education, and Welfare, Wash. 25, D. C.	Livestock, dairy and poultry judging	8	October
National Junior Vegetable Growers Association, University of Massachusetts, Amherst, Massachusetts	Vegetable Demonstration, Production and Marketing, and Muck Crop Show	9	December 1
New Farmers of America, Office of Education, U. S. Department of Health, Education, and Welfare, Wash. 25, D. C.	Judging	5	October 4
<i>Art Contests</i>			
American Automobile Association, 1712 G Street, N. W., Washington 6, D. C.	Traffic Safety Poster Contest	13	March
American Legion Auxiliary, 777 North Meridian Street, Indianapolis, Indiana	Poppy Poster Contest	13	June
Eastman Kodak Company, 343 State Street, Rochester, New York	Photographic Contest	12	March 31
Fisher Body Division, General Motors Corporation, Detroit 2, Michigan	Craftsman's Guild	12	June
General Federation of Women's Clubs, 1734 N Street, N. W., Wash. 6, D. C.	Framed Painting	4	April 15
<i>Essay and Writing Contests</i>			
Advertising Federation of America, 250 West 57th Street, New York 19, N. Y.	Essay Contest	11	April 18
Atlantic Monthly, 8 Arlington Street, Boston 16, Massachusetts	Essay, Story, and Poetry Contest	14	March
Civitan International, Comer Building, Birmingham 3, Alabama	Essay Contest	4	May 15
Ladies Auxiliary to the Veterans of Foreign Wars, 406 West 34th Street, Kansas City 11, Missouri	Essay Contest	13	March
National Employ the Physically Handicapped Week, U. S. Department of Labor, Washington 25, D. C.	Essay Contest	10	March 15
National Sales Executives, 136 East 57th Street, New York 22, New York	Essay Contest	10	March
National Tuberculosis Association, 1790 Broadway, New York 19, New York	School Press Project	10	December 20
Omega Psi Phi Fraternity, Inc., 107 Rhode Island Avenue, N. W., Washington, D. C.	Essay Contest	9	November 17
Propeller Club of the United States, 17 Battery Place, New York, New York	Essay Contest	12	February 28

SPONSORING AGENCY	TYPE OF CONTEST APPROVED	YEARS ON APPROVED LIST	CLOSING DATE OF CONTEST
<i>Examinations</i>			
American Association for the United Nations, Inc., 345 East 46th Street, New York 17, New York	Examination	9	March
American Association of Teachers of French, Eastern Michigan College, Ypsilanti, Michigan	French Examination	10	March 1
Association for Promotion of Study of Latin, Elizabeth, New Jersey	Latin Examination	10	March
American Association of Teachers of Spanish and Portuguese, DePauw University, Greencastle, Indiana	National Spanish Examination	1	February 1
Metropolitan New York Section of the Mathematical Association of America, Polytechnic Institute of Brooklyn, N. Y.	Multiple Choice Questions	1	March 15
<i>Forensic Contests</i>			
Future Farmers of America, Office of Education, U. S. Department of Health, Education, and Welfare, Wash. 25, D. C.	Oratorical Contest Agricultural Subject	6	October
Improved Benevolent and Protective Order of Elks of the World, 1915 Fourteenth Street, N. W., Washington, D. C.	Oratorical Contest	6	June
National Americanism Committee of the American Legion, P. O. Box 1055, Indianapolis, Indiana	Oratorical Contest	15	April
National Association of Radio and Television Broadcasters; Radio-Electronics-Television Manufacturers Association; and U. S. Junior Chamber of Commerce, 1771 N Street, N. W., Wash. 6, D. C.	Voice of Democracy Radio Speech Con- test	9	November
National Forensic League, Ripon, Wisconsin	Forensic Contests Student Congress	13	June 1
New Farmers of America, Office of Education, U. S. Department of Health, Education, and Welfare, Wash. 25, D. C.	Forensic Contests	5	October
Supreme Lodge, Knights of Pythias, 2934 Vernon Place, Cincinnati 19, Ohio	Oratorical Contest	7	March 31
<i>Home Economics and Industrial Arts</i>			
Ford Motor Company, The American Road, Dearborn, Michigan	Industrial Arts Awards	8	June 25
National Red Cherry Institute, 35 East Wacker Drive, Chicago 1, Illinois	Baking Contest	8	February 1
<i>Scholarships</i>			
American Veterans of World War II, 1710 Rhode Island Avenue, N. W., Washington, D. C.	For Children of Deceased or Totally Disabled Veterans	3	February 20

SPONSORING AGENCY	TYPE OF CONTEST APPROVED	YEARS ON APPROVED LIST	CLOSING DATE OF CONTEST
Bausch and Lomb Optical Company, 635 St. Paul Street, Rochester 2, N. Y.	Science Award and Scholarship Program	12	March 1
Consolidated Freightways, Inc., 431 Burgess Drive, Menlo Park, California	Scholarship Awards	6	April 15
Elks National Foundation Trustees, 16 Court Street, Boston 8, Massachusetts	"Most Valuable Student"	10	March 1
General Mills, Inc., 400 Second Ave., South, Minneapolis, Minnesota	Betty Crocker Search	4	December
General Motors Corporation, Detroit Michigan	Scholarship Program	3	December 31
Latham Foundation for the Promotion of Humane Education, Latham Square Building, Box 1322, Stanford, Calif.	Poster Contest	3	March 1
National Merit Scholarships, 1580 Sherman Avenue, Evanston, Illinois	Qualifying Examina- tions by educa- tional Testing Service	3	October 1
National Restaurant Association, 8 South Michigan Avenue, Chicago 3, Illinois	Scholarship Awards	4	February 1
Quill and Scroll Society, 111 West Jack- son Boulevard, Chicago 4, Illinois	Political Quiz	7	February 20
Scholarship Board of the National As- sociation of Secondary-School Principals, 1201 Sixteenth Street, N. W., Washing- ton 6, D. C.	Scholarship Qualify- ing Test	13	October 1
Science Service, 1719 N Street, N. W., Washington 6, D. C.	Science Talent Search	15	December 27
Thom McAn Company, 25 West 43rd Street, New York 36, New York	Thom McAn Leadership Awards	3	March 31
The Wool Bureau, 16 West 46th Street, New York 36, New York	Home Sewing Contest	3	Sept.-June
<i>Miscellaneous</i>			
American Motorists Insurance Company, 4750 North Sheridan Road, Chicago 40, Illinois	Auto Safety Contest	1	April 15
Grand Lodge-Benevolent and Protec- tive Order of Elks of the USA, Elks Memorial Building, 2750 Lakeview Avenue, Chicago, Illinois	Youth Leadership	3	February 1
Daughters of American Revolution, 1776 D Street, N. W., Washington 6, D. C.	Good Citizen Award	9	March
Future Scientists of America, National Science Teachers Association, 1201 Six- teenth Street, N. W., Wash. 6, D. C.	Science or Math Projects	4	March 15
National Soap Sculpture Committee, 160 Fifth Avenue, New York 10, New York	National Soap Sculpture Com- petition	1	April 30

SPONSORING AGENCY	TYPE OF CONTEST APPROVED	YEARS ON APPROVED LIST	CLOSING DATE OF CONTEST
Odd Fellows and Rebekahs of America, 2703 East Lake Street, Minneapolis 6, Minnesota	United Nations Pilgrimages	3	December 31
Our Times, American Education Publi- cations, Wesleyan University, Middle- town, Connecticut	Current Affairs and Editorial Contest	1	January 31
Scholastic Magazine, Inc., 33 West 42nd Street, New York 36, New York	Art, Writing, and Photography	15	March
Science Clubs of America-Science Service, 1719 N Street, Washington 6, D. C.	National Science Fair	6	April

E. APPROVED LIST OF NATIONAL ACTIVITIES FOR 1957-58
(No Contests Included)

The Committee classifies conventions, meetings, work sessions, and educational travel (where no competition for awards exists) as Activities.

The Committee does not look with favor on any national activities that conflict with the regular school year and it assumes that adequate and qualified adult supervision will be provided in the administration of these activities.

SPONSORING ORGANIZATION	MAIN OFFICE	YEARS ON APPROVED LIST	WHEN HELD
American Junior Red Cross	Washington 13, D. C.	5	May 20
Boys' Nation	Indianapolis, Indiana	5	July 5
Distributive Education Clubs of America	Washington 6, D. C.	5	April 1
Freedoms Foundation	Valley Forge, Penna.	2	September 17
Future Business Leaders of America	Washington 6, D. C.	5	June 18
Future Homemakers of America	Washington 25, D. C.	4	July 5
Junior Classical League	Delaware, Ohio	2	August 15
Key Club International	Chicago, Illinois	5	July 6-9
Music Educators National Con- ference	Washington, D. C.	1	March 19-25
National Association of Student Councils	Washington 6, D. C.	5	June 22-26
National 4-H Club Awards Pro- gram	Washington 25, D. C.	6	December June 14-20
National Scholastic Press As- sociation	Minneapolis 14, Minn.	5	August 22-24
National Thespian Society	Cincinnati 24, Ohio	3	June 16-21
New Homemakers of America	Washington 25, D. C.	4	June 3-7
The Williamsburg Student Burgesses	Williamsburg, Va.	1	February 9-12

Glimpses of the Education Program of the Armed Services

IVAN A. BOOKER

SINCE fair exchange is no robbery, one must conclude that the 57 educators and a sizeable number of military leaders who took part in the April Educators Orientation Conference, came out well from that experience. For certainly the conference was one where ideas were freely, and I think fairly, traded.

Educators saw much to admire and praise in the Defense Department's educational program. Military leaders and instructors commended the schools for many aspects of their work. But conversely, the educators and military leaders were candid with one another in pointing out weaknesses in each other's programs.

The Educators Orientation Conference (hereafter EOC), was arranged by the Defense Department to acquaint a group of top-flight educators with the training programs of the Marine Corps, Air Force, Navy, and Army. (And when no one was looking, one school PR man sneaked in!) Participating guests included 8 state superintendents, 17 other staff members from state departments of education, 24 public school administrators (superintendents, assistant superintendents, and high-school principals), and 8 representatives from various educational organizations and governmental agencies.

Because national defense now requires large numbers of men who are highly skilled scientists and technicians, the services want recruits with the best possible background preparation. They urge young men to stay in school, at least to high-school graduation. Even then, the various branches of the Service must give numerous types of additional training to a large percentage of all those they recruit. The better their program is known, the more successful they believe they will be in getting the right boys into the right classes and in developing the specialized knowledges and skills which military service now requires.

The EOC began with registration and a get-acquainted hour at the Mayflower Hotel in Washington, D. C., Sunday evening, April 7th. Monday at the Pentagon, general background information was given to the group about the problem of national defense in an atomic age, and about the manpower needs and the extensive and varied program of education and training which the different branches of service must carry out. High-ranking leaders who addressed the conference included

Ivan A. Booker is Assistant Director of Press and Radio Relations, a Division of the National Education Association.

Donald A. Quarles, Secretary of the Air Force; Admiral Radford, Chairman of the Joint Chiefs of Staff; Stephen S. Jackson, Assistant Secretary of Defense; William Brucker, Secretary of the Army; Thomas S. Gates, Jr., Secretary of the Navy; and Lt. Gen. Vernon E. Megee, Assistant Commandant of the U. S. Marine Corps. They explained the particular aspect of national defense for which each branch of the Service is responsible, and explained the specific problems of manpower and education implicit in that responsibility.

Special buses took us from the Pentagon to Quantico Monday evening in time for a formal dinner with General Twinning and other members of the Marine Corps staff. The next morning we observed the raising of the colors, had briefings and demonstrations on amphibious landings, observed the physical fitness classes in Officer Candidate School, rode in a helicopter to another part of the Post, saw a demonstration of an assault on a pill box, and concluded with summarizing lectures, and a period of discussion with questions and answers.

Educationally most significant was the audio-visual setting for the demonstration of amphibious landings—a scale-model of a peninsula and bay with ships, plans, correct elevations, natural colors, everything very realistic . . . everything moveable, to permit planning and test action. All this was laid out on the floor of a large hall, about the size of a basketball court. The lighting was unbelievable. It could be changed through the total range from complete blackness of night to brilliant sunlight, with simulated dusk or dawn. Flashes from artillery fire were realistically duplicated and there were sound effects to go with them. Here was officer training in action: the physical fitness, the theoretical training, the stress on leadership, the practical field experience.

From Quantico we went by special plane to Biloxi, Mississippi, an Air Force School which specializes in electronics. Again we arrived just in time for dinner. In introducing the Post's choral group, which was there to entertain us, the chaplain said that the director was from Amarillo and would the gentleman in our party from Amarillo (whose fame had preceded him!) please stand. R. B. Norman, President of the National Association of Secondary-School Principals, complied, and the director gasped, "Oh my gosh! My high-school principal!" They got together as soon as dinner was over.

In addition to briefing sessions on the Air Force training program as a whole, we observed classes of various types, each concerned with some phase of electronics. Here the students are taught with the help of mock-ups and then must apply their knowledge using real machines. Classes are small, the work is intensive, and the performance standards are high and rigid.

As a special treat the famous Thunderbird team of precision jet flyers put on an unforgettable demonstration for us—the close flying diamond, wheels and rolls, upside down flying, and all the rest. To end the per-

formance, one of the jets roared down the field, turned straight upward in front of the stands, and continued to climb straight upward until he disappeared through a white cloud about 25,000 feet above us. We agreed with the announcer who said, "That boy sure flies like a homesick angel!"

From Biloxi we continued to Pensacola to observe certain phases of pilot training and aviation research. Again, upon arrival, we were entertained royally by the Post's officers. But Old Man Weather was in a less hospitable mood. We visited the pre-flight school through which all would-be pilots must pass. We went to the center for first-flight instruction, put on flying gear (the more stout hearted ones—and the "show-offs"!), and stood by for an hour or so waiting for the drizzle to subside and the low ceiling to lift. But neither happened. A very few went aloft in the double-seated trainer planes, but were restricted to 500 feet and the immediate area of the flying field. Perhaps 'twas just as well, for my pilot's nickname was "Buzz," and if the weather had been good, he said he had intended to see if I *really* liked to fly! Through briefings we learned of the larger program of naval aviation, and the types of specialization open to those who complete the initial course.

To many of the educators the medical research program at Pensacola was as interesting as pilot training itself. Experiments were underway to measure and control many of the unique effects of high altitude. The experiments dealt with physical changes and with psychological reactions. Complex apparatus was being used for research—and then for instructional purposes—relating to such hazards as pressure changes, temperature changes, noise level, and clear communication by radio.

Last stop for educators was Ft. Benning, one of the chief officer-training schools for the Army. There the formal reception and dinner, for the first time on our trip, included a number of women. My dinner partners included the chief of nurses for the Post's hospital and the principal of the elementary school, a member of the NEA Department of Elementary-School Principals.

In addition to the inevitable briefings we saw demonstrations of physical fitness instruction, a field exercise by a new-type infantry unit which combines an attacking force of foot soldiers and tanks working as a team, and a night-time field exercise in which a replacement unit is brought under fire almost immediately. We were given an overview of officer training in part through a cleverly written play—the first presentation of that type which we had encountered. We visited repair shops and various other post installations. We saw the inside of a light tank and got a close-up view of the Army's new mechanical "mule."

Just before leaving Ft. Benning for Washington, D. C., we had an evaluation for which some of the Pentagon officers had come to meet with us. It was here that present-day schooling on the one hand, and the education programs of the Armed Forces on the other, were critically appraised. The strong points of both were recognized and cited. Weaknesses were criticized with equal candor, and in the exchange both edu-

cators and military men learned some of the reasons why the ideal is not always achieved. Educators saw much to admire in the carefully planned, systematic presentations, in the extensive and skillful use of audio-visual aids, and in the performance standards maintained. They pointed out, however, that each military course, typically, is focused on a very few specific understandings and skills; that the work is highly motivated—far beyond the level of the usual high-school class; that the money spent per pupil hour of instruction is *quite* different; that the usual class for military personnel is smaller than public schools can hope to establish. One unusual standard for teaching competency was reported. Every teacher must outline his lectures, present them before a board of critics, then revise them satisfactorily in the light of the criticisms made before he is allowed to appear before a class. Some of us can recall classes for which we wish our instructors had had that kind of preparation!

Two additional emphases were suggested for the nation's high schools: (1) more extensive and more thorough work in science and mathematics; and (2) better understanding of the true meaning of democracy, including broad knowledge of American history and deep loyalty to our country and its institutions.

If the EOC resulted in better understanding of the training programs and educational opportunities for military personnel on the part of 57 educators, it was a worthy project. Some schools, or classes, will begin to move in new directions. Some students will receive wiser counseling. Undoubtedly, too, some of the military training we saw and discussed is even now being re-appraised and in some cases will receive new directions and new emphases.

One thing became increasingly evident to both schoolmen and military leaders: namely, the sincerity of purpose, the professional competence, the down-to-earth approachableness of the other fellow, which soon provided a common ground of interest and understanding all along the way.

PROTECTION AGAINST POLIO

The high-school population is still not adequately protected against paralytic poliomyelitis. The U. S. Public Health Service estimates that as of July 1, 1957, three out of ten youths, age 15-19, have not received even one inoculation, and only one in five have completed the series of three inoculations. Additional suggestions for extending the vaccination of high-school students will be available in the October 1957 issue of **THE BULLETIN**.

Measures Utilized in the USSR To Motivate Youth Into Science-Technology Fields

ELEANOR S. LOWMAN

THE scientist is an aristocrat in Soviet society. He is well paid, greatly respected, and the ideal of Soviet youth. In part, the veneration of the scientist, the scholar, is traditional in Russia; but through calculated planning the Soviet regime has strengthened and glorified his position. Having thus established a desirable professional goal for Soviet youth, the regime has systematically stimulated the young people of the nation to strive toward it at every step along their road to adulthood. By so doing, Soviet authorities successfully maintain the status of science and simultaneously attract masses of extremely well-qualified youth to scientific and science-related fields from which they can choose only the best and still have available for the benefit of the national economy those who are able to traverse only a part of the way toward this ultimate goal.

SOVIETS USE MANY MEASURES TO MOTIVATE YOUTH

A variety of measures are utilized by the Soviet regime in attracting capable young people to carry out State plans for a build-up of military and economic power. Some of these are subtle; some are bold and direct; all are preconceived. In combination, they have proved highly effective in swelling the tide of future Soviet scientists and engineers.

EARLY STIMULATION OF CURIOSITY ABOUT NATURAL PHENOMENA

Evidence of the comprehensive policy to motivate youth into a life-long appreciation of, and interest in, science is clearly manifested even at the early levels of the Soviet educational system. Measures which encourage and stimulate the natural curiosity of children—even the youngest ones—in the realm of nature and natural phenomena are emphasized in Soviet nursery schools, kindergartens, and in the primary grades.

Every Soviet preschool institution is required to have a nature corner where plants, fish, and animal pets are cared for and observed. During daily walks to parks and playgrounds, children are taught to look about them and prepare to tell their classmates what special scenes in nature they have observed.

Eleanor S. Lowman was formerly associated with the Division of Scientific Personnel and Education of the National Science Foundation, Washington, D. C.

Although the process of learning to read and write absorbs the majority of hours in the standard primary school curriculum (grades I-IV for children aged 7 to 10), the material utilized in these first 4 years in Soviet schools has been carefully prepared so that elementary concepts of science are introduced systematically.

Natural science as a separate subject does not begin until grade IV. However, the text material in grades I to III has been designed to give children necessary background information. Thus, in grade I, children are taught about the seasons of the year, the types of trees found in various regions of the USSR, and about domestic animals. In grade II, they learn about gardening and garden vegetables, about animals in other parts of the world; they study migratory birds and learn something about forests and vegetation. In grade III, children learn about field grains—rye, barley, wheat, *etc.*—and about orchards and fruit trees. They are now also given more advanced instruction about animal life, and the most important aspects of hygiene are brought into the curriculum. In conjunction with their reading, they carry out gardening projects in school experimental plots, are taken on excursions, are encouraged to observe nature on their own and to report what they see, and, as a class, they carry out simple experiments on plants.

By grade IV (children 10 years of age), such background information is believed firm enough to support a class devoted purely to natural science subject matter dealing with inanimate nature—water, air, minerals, soil—and supplemented with class excursions and simple practical experiments.

At the same time, through textbook passages and lectures, elementary concepts of geography have also been introduced, concepts carefully integrated with the natural science instruction. For example, children are expected to acquire some knowledge of topography, of the apparent visible movement of the sun in the sky, of the horizon, weather, and about rivers. By grade IV, in a separate class devoted to geography, Soviet children are given an understanding of how natural phenomena influence agriculture and of how man can modify natural forces through irrigation, soil conservation, crop rotation, and so on. A systematic introduction to the universe and the globe is followed by a short survey of the topography of the USSR—its rivers, lakes, seas, land formations—with a picture of the characteristics and occupations of Soviet people in different regions. Throughout the geography syllabus, emphasis is placed upon teaching children about the most important natural resources of the USSR and about how the Soviet people are developing them.

During the 4-year primary school, the arithmetic curriculum has carried Soviet children from a mere recognition of numbers through a program in which are mastered the four operations of arithmetic—addition, subtraction, multiplication, and division—on real and imaginary numbers, the metric system and measurement of time, decimals, and, finally, the rudiments of geometry.

ACADEMIC PROGRAM AT THE SECONDARY LEVEL EMPHASIZES SCIENCE

All Soviet children are subject to compulsory general education through grade VII, at age 14. At this point it is usual for those boys and girls for whom academic study holds no interest or for whom it is extremely difficult (reported to be about 10 per cent) to enter a vocational training program at a trade school or to take a job in industry or agriculture. Another segment of Soviet youth enters technical and specialized secondary schools preparing for work of a semi-professional nature. (See Chart I below).

Most boys and girls in these semi-professional schools, it must be noted, are enrolled in highly specialized technical courses where the large proportion of the curriculum is devoted exclusively to giving students training in a single narrow applied field of science or technology. From such schools, students are graduated after a 4-year course as radio technicians, auto mechanics, nurses, dental assistants, veterinary aids, draftsmen, laboratory technicians of various types, and so on.

About two thirds of Soviet youth, however, are now reported to be continuing their education in the regular secondary schools, following a compulsory curriculum (there are no electives) oriented toward science.

By the time he receives his diploma, each Soviet graduate of the standard secondary school (through grade X at about 17 years of age) has had 10 years of mathematics carrying him through algebra, geometry, trigonometry, and the beginnings of calculus; 5 years of biology during which he has covered syllabi on botany (a 2-year course), zoology, anatomy, physiology and the principles of Darwinism (1-year courses), plus a sixth year of general psychology which completes his study of life science; 4 years of chemistry—the first 3 of which were a systematic survey of inorganic chemistry and the fourth an introduction to organic chemistry; one year of astronomy during which he has been taught a short course in the structure, movement, and development of the heavenly bodies; and 5 years of physics during which he has taken a full course in mechanics, including hydro- and aerodynamics—heat, molecular physics, solid state physics, the operation of gas and steam, electricity, and optics.

In addition, the Soviet student studies other subjects such as mechanical drawing and drafting, geography, and 5 years of a foreign language (ending with some fluency in reading selected scientific and technical literature in the foreign tongue, which also complement his science courses).

Thus, the 1.5 million boys and girls who finished the regular Soviet secondary school in June 1955 had in fact completed a rigid program of studies, almost half of which was directly devoted to scientific and technical subject matter.¹

¹In sharp contrast to the emphasis on science in Soviet schools is the situation in the US. In the academic year ending June 1955, for example, it is estimated that less than a third of about 1.3 million students graduating from American high schools had taken as much as a year of chemistry. About a fourth had had a year of physics, and less than a seventh had studied such advanced mathematics as solid geometry, or trigonometry.

CHART I—THE SOVIET EDUCATIONAL SYSTEM

Age of Pupil	Grade in School				
23		Medical schools (6 years)			
22	6	All engineering schools (5½ years)			
		Universities, miscellaneous types (5 years)			
21	5	Higher educational institutions	Teacher training, agricultural socio-economics schools (4 years)		
20	4				
19	3	4- to 6-year courses			
18	2	Vocational schools	Technical schools		
17	1	1- and 2-year courses	2-year courses		
16	X	SENIOR SECONDARY GRADES		Technical and specialized secondary schools 4-year courses	Trade schools 6 mos. to 2 years.
15	IX				
14	VIII				
13	VII	JUNIOR SECONDARY GRADES			
12	VI				
11	V				
10	IV	PRIMARY GRADES			
9	III				
8	II				
7	I				
3-6		KINDERGARTEN			
Birth to 3		NURSERIES			

Compulsory education

Reinforcing the academic training prescribed for all Soviet boys and girls is a method of subject presentation sometimes known as cyclical-spiraling, a method in which an elementary concept of a given subject is introduced at a younger age than is customary in United States schools and is reviewed and enlarged upon in subsequent grades. Algebra, for instance, is begun in Soviet schools in grade VI (when students are 12 years of age) and continues as an integrated part of the mathematics program each year right through grade X.

The ramifications of such a curriculum policy are important. In chemistry and physics, for instance, expensive laboratory equipment is more completely utilized since all students take these subjects for 4 or 5 consecutive years respectively. Also, subject matter tends to be retained better through the process of subsequent review, reinforcement, enlargement, and, equally important, students know they will have to remember that material well in order to pass the next year's course.

In teacher assignment practice too, the Soviets believe the cyclical-spiraling method of subject presentation to be advantageous. Because one teacher can be responsible for teaching the same subject to several different grades in the same school, it is possible in the USSR for teachers to be trained to teach a single subject and to be assigned to teach it in the schools. In this way Soviet students are assured of instructors who are both specialists in the subject they teach and graduates of courses in the theory and practice of effective teaching.

ACADEMIC TRAINING SUPPLEMENTED BY WELL-ORGANIZED EXTRACURRICULAR ACTIVITIES

Supplementing a vigorous and primarily theoretical science instruction program in Soviet schools are a variety of extracurricular activities catering to and fostering the interests of Soviet boys and girls in the practical aspects and applications of scientific principles.

As with many European educational systems, the curriculum in Soviet schools is chiefly an academic one with actual hours in class devoted almost exclusively to imparting basic information. Heavy emphasis is placed upon the rote memorization of fundamentals—be they rules of Russian grammar, the vocabulary of a foreign language, the multiplication tables, chemical formulas, or the geographical descriptions of foreign countries.

Opportunities for boys and girls to cultivate special aptitudes, indulge individual interests, and uncover hidden talents are, in the USSR, relegated to the realm of "after school provision of leisure." For this reason, the well-organized and attended system of extracurricular activities in the Soviet Union assumes special importance.

As in the US, there are a great many different kinds of extracurricular activities in the USSR reflecting the diverse interests of youth. Clubs are to be found organized for boys and girls in sports, drama, literature, music, art, dancing, photography, history, physics, chemistry, astronomy,

agriculture, botany, mathematics, journalism, and so on. Soviet children may participate in these activities at school at all levels in special nationwide organizations, in club houses organized by the Communist Party, or at the club houses operated by trade unions for members and their families.

On the whole, Soviet extracurricular programs are characterized by central planning and control, relatively lavish support by the State, thorough integration with the required school curriculum, and a tendency to adhere to activities which will develop youthful abilities rather than to those which are primarily recreational. Furthermore, it is here that measures designed to motivate Soviet youth into fields of science and technology are particularly evident and apparently very successful.

SCIENCE CLUBS AT SCHOOL

In every Soviet school there exists clubs and circles under the leadership of especially trained instructors and teachers who are aided and assisted by students from teacher-training institutions assigned to help out with extracurricular clubs as part of their practice teaching experience. Participation in these school clubs is open to the students on a voluntary basis. No child, however, may join more than 2 clubs at a time. Each club meets several times a week for 2 or 3 hours after class. In some, children are grouped purely on the basis of interest irrespective of age or grade. In others the grouping approximates the age-grade level.

Directions on how a club should be set up, organized, and run are centrally prescribed. Syllabi outlining the material to be covered are issued regularly by the ministries of education in each of the republics as are teaching aids and subject work plans. All have been closely correlated with the required curriculum in the schools. Frequent consultation and close cooperation between club leader and class teacher are expected. Although school clubs function as a leisure activity for Soviet children, they are used effectively to extend classroom instruction. Through such clubs the gifted students may also benefit from the extra challenge and stimulus.

The actual work of the science clubs in Soviet schools varies with the age of the members and the subject matter, as is to be expected. In general, students interested in chemistry carry out a variety of experiments in which they learn advanced laboratory techniques and undertake more difficult chemical analyses. The work of the physics clubs may be experimental—in radio, aviation, electricity, the remote control of machinery, and other subjects of interest to young experimenters. Or it may involve members' learning research techniques through the preparation of papers on the history of physics or the compilation of digests of the more popular accounts of current physical theories. When charts, models, or pieces of apparatus made in these clubs are found to be of use in the regular school lessons, they may be manufactured for mass distribution or suggested for duplication in other schools.

SCIENCE-TECHNOLOGY FACILITIES AT PARTY AND TRADE UNION CLUBS

Probably the largest variety of extracurricular activities are to be found in programs carried out under the auspices of the Communist Party in the Pioneer Palaces and Houses and the different trade unions in clubs for members and their families known as Palaces and Houses of Culture.

The extracurricular instruction provided at the Pioneer Palaces and Houses is open to all children between 7 and 18 years of age who have good marks in school. The well-trained staff includes both full-time paid instructors and large numbers of part-time instructors—many of them well-known authorities in their particular fields such as university professors, famous authors, sculptors, ballet mistresses, musicians, and so on—who donate their time as a community service.

As with school clubs, the activities provided for children by the Party and trade unions are all carefully programmed with syllabi issued, indicating the work to be covered in each of the various circles. Once having made a choice of which circle they wish to join, youngsters are expected to remain in it for at least a year.

An indication of the type and diversity of activity available through Party and trade union facilities may be gathered from a partial listing of activities carried out at one of the largest Pioneer Palaces. There, circles are grouped into those dealing with technology, science, art, sports, books, and political work. In the technology division, for example, may be found: (1) the aviation engineering section with shops for work in aerodynamics, motors, and engines for aircraft, model airplanes and gliders; (2) the transportation section with workshop facilities for learning about motors, railroads, naval craft, and city electric transport systems; (3) the photography-movies section with laboratories and dark-rooms for circles devoted to both still and movie photography; (4) the communications section with special rooms set aside for work with radio, telephone, and telegraph equipment; (5) the energetics-electrical section with 5 laboratories; (6) the mechanics section; (7) the graphics section; (8) the carpentry-mechanics section; (9) the locksmith-mechanics section; (10) the technical painting laboratory; (11) the machine assembly laboratory; (12) the machine construction section.

Though less elaborate and with less variety offered, the same types of activities are to be found in the other Pioneer Houses and the clubs of the other trade unions.

SPECIAL NATIONAL SCIENCE-TECHNOLOGY ORGANIZATIONS

Because the territory embraced by the USSR extends over such a large area, special national organizations have been created to provide guidance and direction of clubs embracing youth in every part of the Soviet Union—even those in the largely isolated towns and districts. Two of these national organizations—the Young Technicians and the Young Naturalists—are especially popular.

Boys and girls who have an urge to make things and to see how they will work are attracted to the Young Technician clubs. Two or three days a week students with an inventive or mechanical bent meet and, under the guidance of experienced science teachers or engineers, construct working models of planes and boats, build and assemble radio transmission and reception apparatus, and so on.

These clubs, or technical stations as they are called, are organized both centrally and locally, the central stations providing directional guidance and instructions on the best forms of such activities and suggestions on successful methods of teaching them. The central stations constantly carry out research dealing with various aspects of the program, and periodically arrange conferences for sponsors of technical stations in rural regions.

Mechanically minded members of these clubs are encouraged to develop an original approach in whatever they undertake. For example, Soviet youth cannot buy model aircraft kits like those available to American children. Instead, members of the "Young Aircraft Modelers" are provided the raw materials, and left to develop and construct through trial and error and inventive growth their own aircraft. In this way boys and girls learn many principles of aviation, and at the same time they may also create new designs. Every idea submitted is considered by the club leaders. Whenever one appears practical, the student makes a blueprint and then begins construction. In the process, he learns a great deal under expert guidance.

Clubs of Young Naturalists have been designed for boys and girls especially interested in living things. Just as the technical stations, the Young Naturalist clubs or stations are organized both centrally and locally, with the central stations providing guidance and assistance through regular publication of syllabi and courses of instruction. In addition, the central stations maintain a voluminous correspondence with young naturalists all over the Soviet Union. Youngsters are encouraged to collect specimens of local flora and fauna, describe seasonal changes, *etc.*

A central Young Naturalist Station is generally a rather large estate with laboratories and various other experimental facilities. It is staffed with both permanent specialists and visiting botanists, zoologists, agronomists, chemists, and so on, and is headed by a director. The type of activities in which each outlying station engages depends primarily, of course, on its location. But for the nation as a whole, Young Naturalist Stations offer school children opportunities to specialize in plant breeding, grafting, fertilization, soils; hothouse culture of citrus fruits; the domestication, feeding, and care of animals; poultry and methods of increasing egg production; and so on. The work at all stations is closely correlated with natural science classes at school. A station may assume responsibility for providing the specimens for lessons in botany or for the nature corners in the school. An associated activity may be regional surveying and general

field trips organized for members during their summer holidays. Labeling, classifying, and arranging exhibits into miniature museums upon their return help members acquire skill and accuracy in observing.

SIGNIFICANCE OF EXTRACURRICULAR ACTIVITIES IN MOTIVATION OF YOUTH

According to Soviet educators, extracurricular activity in the USSR is explicitly educational in conception and interpretation. It is enriched activity designed to stimulate interest, foster ability and talent, and encourage the development of creative ingenuity. The Soviet authorities believe that through the wide dispersion of many different kinds of scientific and technical extracurricular activities, boys and girls in every part of the USSR not only grow up with a deep appreciation of the work of the scientist and engineer, but also develop an enthusiasm for work in these fields which lasts them throughout their lives.

POPULARIZATION OF SCIENCE AND TECHNOLOGY AT THE SECONDARY-SCHOOL LEVEL

The aim of the Soviet secondary-school curriculum is to give each graduate a general introduction and communist orientation to each of the basic disciplines—history, literature, geography, mathematics, physics, chemistry, natural science—so that, by the time students complete secondary school and are ready to begin professional training in a higher educational institution, they will know which field and possibly what aspect of it they want to pursue. At the same time, because the Soviet regime finds its economic and military growth dependent upon a greater number of scientists and engineers than historians and lawyers, for example, a very extensive program designed to popularize science and technology permeates the life of the Soviet school child.

READING MATTER FOR CHILDREN

For more than two decades there has been an actively conducted movement to popularize school science through children's scientific literature and to simplify it without, however, omitting essential facts or distorting the necessary theory. The Soviets appear to be definitely opposed to the over-simplification of science. A variety of popular journals devoted to the applied side of science such as *Science and Technology* are widely read by school children. Perelman's many popular books (*Amusing Physics, Amusing Mechanics, Physics at Every Step, A Trip to the Moon in a Rocket*); and Karpovitz's *Molecule, Atom, and Electron*, for example, have all claimed the attention of the more serious of the secondary-school science pupils.

As a matter of fact, the State publishing houses of children's literature must give first place in number of titles published to books dealing with scientific and technical themes. Special contests for authors of children's scientific and technical books are held annually throughout the USSR.

with substantial prizes of money and great acclaim being accorded the best of such work.

The librarians of children's libraries must arrange exhibits of the recent books on these themes and invite members of the scientific and engineering profession to lecture to groups of children at the library on the work in which they are engaged.

As a result, even though some of the better books are issued in editions of hundreds of thousands, they are almost immediately sold out. One of the trying experiences in the Soviet Union is the attempt to secure copies of the better known technical and semi-technical books and journals, which, in spite of their large editions, are almost never available a month or even a week after publication.

LECTURES AND ENTERTAINMENT MEDIA

School directors must organize evening lectures for students at which they may meet and hear industrial engineers, scientists, explorers, and others in various fields tell about their work, show slides of their field trips and explorations, and so on. The science faculties in higher education institutions also organize special series of lectures to which members of the senior classes in the neighboring schools are invited.

In addition, there are special children's theaters, movies, television programs, and radio broadcasts in which every opportunity is found to present dramatic productions depicting the "great adventure of socialist construction," outstanding scientists and their work, and adventure stories whose heroes are geologists, arctic explorers, and so on.

Children's movies in particular have been found an extremely effective measure motivating youth into an eagerness for careers in science and technology. By law, Soviet children under 16 years of age are prohibited from attending adult films; hence, additional reason for the considerable success enjoyed by Soviet movies for children.

Produced by a special section of the Union-Republic Ministry of Culture at the request and direction of the Ministries of Education, these visual aids are edited with a view toward pedagogic value and effectiveness of presentation, as well as suitability of subject matter. The 1954 film catalog distributed by the Union-Republic Ministry of Culture listed 937 titles of movies for children, many of them grouped around the basic subjects of the school curriculum. Those relating to astronomy, for example, dealt with such topics as the universe, thunder and lightning, solar and lunar eclipses, the rainbow, the changing of the seasons, and the sun. Sample titles of movies listed under the physics section included: "A Drop of Water," "In the World of Crystals," "In the Laboratory of the Sun," "Rays of the Spectrum," "Marked Atoms," etc.

While a majority of the special children's films are produced specifically to supplement the class lessons—a large proportion of the Soviet schools are now reported to possess projection equipment and screens—many other films considered excellent by American standards deal with Soviet

industry, agriculture, physical hygiene, medical science and preventive medicine, fire-fighting, and traffic regulations. All films are freely available and widely used.

CONTESTS

An integral part of the campaign to popularize science and technology among Soviet youth consists of annual contests known as "olympiads," in which participants demonstrate their aptitude and knowledge of one of the sciences—mathematics, physics, chemistry, *etc.* Eliminations in the local, district, regional, republic, and, finally, in national competitions result in prizes and prestige for the winners as well as almost certain priority in obtaining admission to the higher education institutions of their choice.

The enthusiasm and effort generated by Soviet students in these competitions exerts another powerful stimulus promoting desirable professional goals among Soviet youth.

EXHIBITIONS

A variety of exhibitions also contributes to the scientific and technological orientation of Soviet children. In addition to such large enterprises as the All-Union Agricultural and Industrial exhibitions, large groups of pupils and their parents regularly visit the special science sections in the parks of culture and rest located in the larger cities and towns of the USSR. Here, in these science centers, may be displayed exhibits of pneumatic and electrostatic devices, optical illusions, remote control of machinery, examples of radio and aeronautical engineering developments, arctic-exploration materials, and so on. Sometimes there is a special room devoted to the phenomena of light and color. Often there are separate chemistry, biology, and physics rooms completely equipped for pupil experimentation. University students, serving as guides, demonstrate the exhibits and suggest further reading. Most of these exhibits bear a decidedly technical character, and, although popular with adults, are well within the range of the secondary-school science population.

EXCURSIONS

Science excursions form an integral part of the science classes at all levels of the Soviet educational system, and are systematically utilized for their contribution to the polytechnical ideal of Soviet education. Numerous volumes discussing the types of excursions desirable for the different science subjects and excursions to be employed by the teacher in actuating worth-while trips have been compiled and widely distributed.

Suggested excursions for physics classes include a transformer substation, a foundry, an electroplating establishment, a telephone exchange, a radio broadcasting station, a refrigerated railroad car, a machine shop, and so on. Similarly, recommended trips in conjunction with chemistry

classes include visits to such plants as those used for making hydrochloric acid, sulphuric acid, fertilizers, cement, glass, porcelain, metals, oil-refinery products, coke, wine and beer, refined sugar, aniline dyes, plastics, and other kinds of synthetics.

Because educators in the USSR are firmly convinced of the tremendous possibilities for enrichment of science teaching inherent in the Soviet industrial and technical scene, much research has been carried out on how to conduct an excursion and how to plan for it and incorporate it effectively into the class program. For example, some of the basic technical considerations in a chemistry excursion are said to include: (1) the nature of the chemical processes involved; (2) the technical realizations of these processes and difficulties to be overcome; (3) the raw material used in the undertaking and sources of this material; (4) preparation of the raw material for production; (5) study of typical pieces of apparatus employed; (6) study of the functions of apparatus—principles of continuous and reverse flow, effect of temperature, *etc.*; (7) methods of transportation; (8) duties of employees and management; (9) the laboratory—control of production; (10) the quality of the finished product, and defects and their causes; (11) cost of production; (12) part played by the plant in the national economy.

The seriousness accorded the role of the science excursion, however, does not mean that it is carried out at the expense of regular curricular science work. Indeed, in grades IV through IX where the emphasis on excursions is especially heavy, an extra 6 days a year have been added to the normal school year for use specifically for the excursions scheduled periodically throughout the science course syllabi.

END RESULT

Through such measures as have been cited, the USSR has been able to achieve unusual success in obtaining within one generation a body of employed scientists and engineers approaching that of the US in number and professional training, and is now able to graduate reinforcements for this manpower reservoir at rates almost two and three times that achieved in the United States.

Nor do the Soviet authorities have to drain the bottom of the academic barrel to achieve such large numbers of science-engineering majors. As a matter of fact, the evidence indicates that the intellectual caliber of the student going into these fields in the USSR approximates that of his counterparts in the United States.

Soviet higher education institutions currently have an average of 3.6 acceptable applicants for each vacancy. But, as foreign observers generally point out, because of higher scholarships awarded to science and engineering majors and because of their preferred status in the Soviet economy following completion of their professional training, the num-

bers of students applying for each vacancy in the science and engineering faculties are in many instances several times larger than the national 3.6 average.

DIFFICULTIES ENCOUNTERED IN DEVELOPING SCIENCE MOTIVATION POLICY

Despite certain success presently being achieved, Soviet educators are quick to point out that there have been enormous difficulties encountered in developing a program efficiently motivating youth into fields of science and technology, and that what is characteristic at the present time was not representative 5, 10, and especially 15 or more years ago.

First of all, while the general outline of the present Soviet science-technology motivational program was fairly well thought out and under way by the mid 1930's, Soviet literature reveals that the scope and certainly the effective presentation of a great many aspects of the program were limited by the critical shortages of equipment and facilities, and most especially by the great shortage of teachers and able leaders for youthful scientific and technical pursuits.

Secondly, while it is only fair to state that Soviet science education has derived a good measure of its strength from pupil-inspired and pupil-executed projects, the official statistics giving the number of clubs and extracurricular facilities do not completely convey the picture of the situation, and the universality of the science-motivation program remains subject to critical examination. It is apparent that every effort continues to be made to incorporate children in remote parts of the USSR into various programs *via* correspondence and advisory services, through traveling exhibitions, lectures, and lending libraries. Nevertheless, it is still a fact that today not all Soviet children have equal or even similar opportunity to partake of senior secondary education (an essential requirement for obtaining a higher education), much less to enjoy the enriched offerings of the variety of extracurricular facilities available to youth in the cities and industrial centers.

Finally, while it must not be forgotten that shortages are being eliminated and minimized at an accelerating rate, it is still obvious that it is quite one thing to provide equipment, material, and general supplies for group use in community centers, and quite another to provide such things in sufficient quantity and at low enough cost for consumption by individual and family; that there is still a big difference between a boy working with a group on a car in the auto shop of his school or at a local technical station and having his own hot rod jalopy to fix up in his own garage, or taking pictures with a school camera and developing film in a club darkroom *versus* experimenting with his own camera and developing film in a darkroom in his own house.

CONCLUSION

As has been indicated, the cultural milieu in the USSR is one in which high financial remuneration and prestige is accorded members of the Soviet scientific and technical professions. In addition, there is a concerted effort on the part of the regime to motivate youth into pursuing careers in these fields via a combination of: (1) rigorous academic training in science at school; (2) a vast extracurricular program which emphasizes activities of a scientific or technical nature; and (3) a campaign to glamorize and popularize science and technology through all media of communication.

Evidence of the success of Soviet motivation measures is readily apparent. With a college graduation class roughly two-thirds the size of that in the US, Soviet higher education institutions are currently turning out about three times as many engineers and about twice as many persons specializing in science as in the United States. In addition to steady increments of professionally trained scientific and technical manpower, the economy of the USSR is benefiting from large numbers of semi-professionals entering fields of science and technology. And, perhaps equally important, there is in the USSR a growing number of ordinary citizens who, although themselves are not directly employed in a scientific or technical capacity, nevertheless, are imbued with an appreciation and understanding of many of the problems facing the Soviet regime in its effort to achieve national scientific and technological progress.

BIBLIOGRAPHICAL COMMENTARY

Primary source material for this article was gleaned from extensive reading of Soviet education journals, periodicals, and books—particularly those references since 1950—the Soviet press, and comments obtained from Soviet educators, and from former Soviet students and teachers. However, the reader interested in pursuing materials in English on this or related topics is well advised to survey the following:

ASHBY, ERIC. *Scientist in Russia*. New York: Penguin Books. 1947.

DEWITT, NICHOLAS. *Soviet Professional Manpower*. Washington 25, D. C.: Government Printing Office. 1955.

EFRON, ALEXANDER. *The Teaching of Physical Sciences in the Secondary Schools of the United States, France, and Soviet Russia*. New York: Bureau of Publications, Teachers College, Columbia University. 1937.

LOWMAN, ELEANOR S. *Education in the USSR*. Washington 25, D. C.: Government Printing Office. 1957. (Not yet released.)

"New Minds for the New World," *The New Statesman and Nation*, September 8, 1956, pp. 279-282.

"Training and Utilization of Scientists and Technologists in the Soviet Union," Extracts from Minutes of Meeting of U. K. Parliamentary and Scientific Committee, December 18, 1956.

The Two-Year Junior High School

ELLSWORTH TOMPKINS
and VIRGINIA ROE

MORE than 21 per cent of all junior high schools in the United States are 2-year schools, according to most recent nation-wide statistics.¹ Two-year junior high schools of grades 7-8 amount to 19.4 per cent of the total, and those of grades 8-9 make up 1.8 per cent.

The 2-year junior high school is the second most common type of junior high school organization. The ratio of 2-year to 3-year junior high schools is 1:3½; the latter constitute 74.2 per cent of all junior high schools.

Despite the relative importance of the 2-year school in junior high-school organization, there is extremely little literature or research on the 2-year junior high school. To provide some initial data on this neglected area, the Committee on Junior High School Education of the National Association of Secondary-School Principals offers this report of "The Two-Year Junior High School."

In August 1956 we sent a letter requesting information on status, organization, and principal's preference for type of organization to all 2-year junior high schools known to be in existence in 1952. Schools established since that date were added to this list; it may be, however, that many of these new schools are not included in this report. We wish to thank Mabel Rice of the U. S. Office of Education's Research Staff for help in preparing the list of 2-year junior high schools. A brief accounting of the number of letters sent and the number of replies follows:

Letters sent to 2-year junior high schools	750
Replies received	523
Replies used in tabulation	379
Replies not included in tabulation	144

The unused 144 replies include:

Responses from 3-year junior high schools	72
Responses from other grade combinations	32
Duplicates	25
Responses from 2-year junior high schools changed to 3-year junior high schools this school year	15
TOTAL	144

¹Walter Gaumnitz, et. al. *Junior High School Facts*, Mies. 21, Office of Education, Nov. 1954. For sale by Supt. of Documents, GPO, Washington 25, D. C., 50 cents.

Ellsworth Tompkins is Assistant Secretary for Administrative Services and Virginia Roe is a staff member, both of the National Association of Secondary-School Principals, Washington, D. C.

The 379 responses used in this report include:

Junior high schools with grades 7-8	332
Junior high schools with grades 6-8	30
Junior high schools with grades 8-9	15
Junior high schools with grades 9-10	1
Junior high schools with grade 8	1
TOTAL	379

The schools with grades 6-8 are included in this report because they house grades (7-8) commonly regarded as secondary education, the assumption being that grade 6 in this type of school more characteristically belongs to elementary education.

TABLE I—NUMBER OF TWO-YEAR JUNIOR HIGH SCHOOLS RESPONDING, BY GRADES IN SCHOOL

¶ Replies from 2-year junior high schools in Illinois, Iowa, Massachusetts, Michigan, Indiana, and Texas amount to about half of total responses (40 states).

¶ There is wide variation among states on the incidence of 2-year junior high schools. Comparison of the total number of *all 2-year junior high schools* (grades 7-8 only) with the total number of *all other types* of junior high schools shows the following percentage in states having high incidence: (*Read: 79% of all junior high schools in Montana are 2-year junior high schools.*)

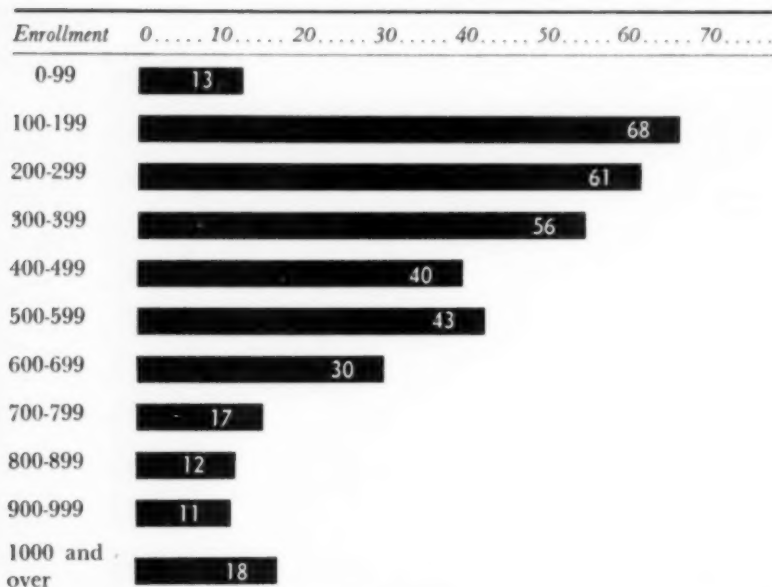
- | | |
|----------------------|----------------|
| 1. Montana 79% | 5. Idaho 65% |
| 2. Wyoming 78% | 6. Iowa 60% |
| 3. New Hampshire 75% | 7. Indiana 58% |
| 4. Illinois 66% | 8. Oregon 50% |

TABLE I—NUMBER OF TWO-YEAR JUNIOR HIGH SCHOOLS RESPONDING,
BY GRADES IN SCHOOL AND BY STATE

State	No. of Schools Responding	Grades in School				
		7-8	8-9	6-8	8	9-10
Alabama	9	9				
Arizona	2	1		1		
California	5	4	1			
Colorado	8	8				
Connecticut	2	1	1			
Florida	12	11	1			
Georgia	8	5	2	1		
Idaho	4	4				
Illinois	58	51	1	6		
Indiana	25	24		1		
Iowa	29	25		4		
Kansas	6	5		1		
Kentucky	1	1				
Louisiana	8	8				
Maryland	4	4				
Massachusetts	28	24	1	2	1	
Michigan	27	25		2		
Minnesota	1	1				
Mississippi	3	2				1
Missouri	5	4	1			
Montana	15	15				
Nebraska	7	6		1		
New Hampshire	2	2				
New Jersey	3	3				
New Mexico	6	6				
New York	9	8		1		
North Carolina	1			1		
North Dakota	1	1				
Ohio	2	2				
Oklahoma	12	12				
Oregon	17	15		2		
Pennsylvania	3	3				
Rhode Island	1	1				
South Carolina	4	3		1		
Texas	20	10	4	6		
Virginia	5	4	1			
Washington	4	2	2			
West Virginia	5	5				
Wisconsin	8	8				
Wyoming	9	9				
TOTAL	379	332	15	30	1	1

CHART I. ENROLLMENT SIZE OF 2-YEAR JUNIOR HIGH SCHOOLS RESPONDING

Derived from Data in Table II
Number of Schools Responding



Read as follows: There are 13 junior high schools having an enrollment of 0-99; there are 68 junior high schools having an enrollment of 100-199, etc.

TABLE II—NUMBER OF TWO-YEAR JUNIOR HIGH SCHOOLS RESPONDING, BY SIZE OF ENROLLMENT AND BY STATE

¶ This table and the preceding chart show that the 2-year junior high schools responding are not predominantly small schools.¹ The average of enrollments of the 369 responding 2-year schools is 458.88 pupils.

¶ Largest average size of responding 2-year junior high schools is found in (1) California, (2) Georgia, (3) Louisiana, (4) Maryland, and (5) Virginia.

¶ Largest minimum size responding of 2-year junior high schools occurs in (1) California, (2) New Jersey, (3) Connecticut, (4) Georgia.

¶ Smallest average size of responding schools exists in Oregon, Iowa, Maryland, Alabama, Kansas, and Washington.

¹A school of 300 or fewer pupils has been regarded unofficially by the US Office of Education as a "small school."

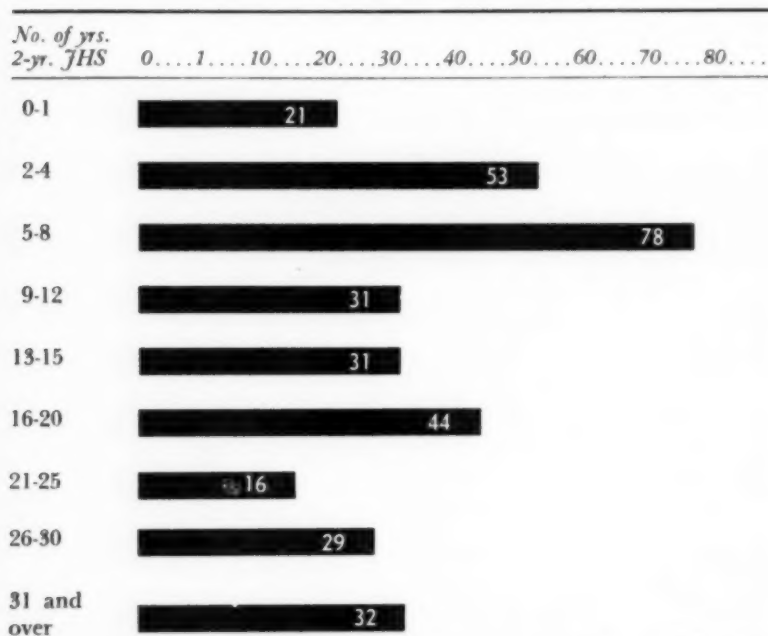
TABLE II—NUMBER OF TWO-YEAR JUNIOR HIGH SCHOOLS RESPONDING,
BY SIZE OF ENROLLMENT AND BY STATE

<i>State</i>	<i>No. of Schools Responding</i>	<i>Range</i>	<i>Median</i>	<i>Mean</i>
Alabama	9	80-950	400	482.7
Arizona	2	280-740		
California	5	550-1200	960	927.0
Colorado	7	100-611	275	287.2
Connecticut	2	418-716		526.8
Florida	11	34-1800	400	599.3
Georgia	8	362-1400	835	897.1
Idaho	3	240-600	250	363.3
Illinois	56	90-1020	345	405.5
Indiana	24	170-915	426	466.1
Iowa	29	61-560	170	188.4
Kansas	6	80-450	185	223.5
Kentucky	1	405		
Louisiana	8	135-1350	770	735.6
Maryland	4	78-1050	681	622.7
Massachusetts	27	96-850	400	413.5
Michigan	25	150-940	380	419.0
Minnesota	1	1100		
Mississippi	3	180-600	422	400.6
Missouri	5	310-1130	500	568.0
Montana	15	86-1138	305	381.2
Nebraska	7	110-290	200	198.1
New Hampshire	2	200-360		280.0
New Jersey	3	445-555	525	508.3
New Mexico	6	189-1000	537	565.6
New York	8	290-700	520	526.2
North Carolina	1	522		
North Dakota	1	600		
Ohio	2	175-500		337.5
Oklahoma	12	115-600	237	294.5
Oregon	17	45-600	315	325.5
Pennsylvania	3	120-950	525	531.6
Rhode Island	1	350		
South Carolina	4	350-700	622	573.5
Texas	20	135-1130	435	471.9
Virginia	5	255-915	565	618.2
Washington	4	80-760	395	407.7
West Virginia	5	200-660	325	373.0
Wisconsin	8	100-900	207	339.2
Wyoming	9	100-1200	275	343.8
TOTAL	369	34-1800		458.88

CHART 2. NUMBER OF YEARS A TWO-YEAR JUNIOR HIGH HAS BEEN IN EXISTENCE

Derived from Data in Table III

Number of Schools Responding



Read as follows: 21 schools have been 2-year junior high schools for the past year; 53 schools have been 2-year junior high schools from 2-4 years, etc.

TABLE III—NUMBER OF YEARS OF EXISTENCE OF 2-YEAR JUNIOR HIGH SCHOOLS, BY SCHOOL AND BY STATE

¶ This table shows that the 2-year junior high school is *not* a new development in junior high-school organization. The approximate median years of existence of all 2-year junior high schools responding is 7.5 years (median of medians).

¶ Although a few have been established within the last 2 years, many 2-year junior high schools have been in existence for 20-40 years. For example, 51 responding 2-year schools in Illinois show a median of 20 years of existence. Comparable data for 24 responding 2-year schools in Indiana and 12 schools in Montana indicate medians of 14.5 and 20 years of existence respectively.

TABLE III—NUMBER OF YEARS OF EXISTENCE OF 2-YEAR JUNIOR HIGH SCHOOLS, BY SCHOOL AND BY STATE

<i>State</i>	<i>No. of Schools Responding</i>	<i>Range</i>	<i>Median</i>
Alabama.....	8	2-15	8
Arizona.....	2	10-20	
California.....	5	1-15	4
Colorado.....	8	5-30	25
Connecticut.....	2	5-20	
Florida.....	12	1-10	5
Georgia.....	7	1-26	12
Idaho.....	2	15-20	
Illinois.....	51	1-40	20
Indiana.....	24	3-40	14.5
Iowa.....	19	4-37	15
Kansas.....	3	11-35	26
Kentucky.....	1	2	
Louisiana.....	8	1-8	5
Maryland.....	3	5-6	5
Massachusetts.....	25	1-38	7
Michigan.....	25	1-40	8
Minnesota.....	1	1	
Mississippi.....	3	8-20	10
Missouri.....	5	1-22	2
Montana.....	12	1-37	20
Nebraska.....	5	15-32	20
New Hampshire.....	1	25	
New Jersey.....	3	1-25	2
New Mexico.....	6	5-12	6
New York.....	8	1-26	6
North Carolina.....	1	7	
North Dakota.....	1	20	
Ohio.....	2	2-3	
Oklahoma.....	11	4-36	15
Oregon.....	14	2-36	7
Pennsylvania.....	3	1-3	3
Rhode Island.....	1	20	
South Carolina.....	4	3-10	6
Texas.....	19	1-26	8
Virginia.....	4	2-40	4
Washington.....	4	2-14	6
West Virginia.....	5	1-28	4
Wisconsin.....	8	1-30	17
Wyoming.....	9	2-20	8
TOTAL.....	335		

TABLE IV—GRADES FOR WHICH PRESENT TWO-YEAR JUNIOR HIGH-SCHOOL BUILDING WAS CONSTRUCTED, BY STATE

¶ This table shows answers given by 2-year junior high-school principals to the questions: Was your school constructed for a 2-year junior high school? If not, for what grades was the school built?

¶ Information on these questions is useful because many junior high schools of all types of organization are housed in buildings designed for other grade combinations. When this occurs, the building may not be suitable for an adequate junior high-school program.

¶ Ninety-two, or 24.5 per cent, of the 376 schools responding report that their building was constructed specifically for a 2-year junior high school.

¶ The remaining 75.5 per cent of the responding 2-year junior high schools report that their buildings were constructed for these grade combinations:

<i>Number of Schools</i>	<i>Grade Combinations</i>	<i>Type of School</i>
94	10-12; 9-12	Senior and 4-year high school
11	7-12	Junior-senior high school
37	7-9	3-year junior high school
38	1-12	Consolidated elementary and secondary
11	1-9	Combination elementary and junior
61	1-6; 1-7; 1-8	Elementary
32	Other	

The "Other" grades (32 schools) include 3 (8-12), 6 (6-8), 2 (4-8), 2 (5-8), 9 irregular grade combinations, and 10 unspecified.

¶ It is evident that the 105 responding 2-year junior high schools now occupying buildings originally constructed for 3-year senior, 4-year regular, or 6-year junior-senior high schools, are greater in number than those built for any other single grade combination.

¶ The fact that 37 two-year junior high schools now occupy buildings originally constructed for 3-year junior high schools indicates the possibility that some 2-year schools may be a temporary arrangement to house increased enrollments. (Cf. Table VI).

¶ With the exception of the 92 buildings especially designed for 2-year junior high schools, it is apparent that the building facilities for 2-year junior high schools have been improvised.

¶ The relatively large number of 2-year junior high schools in Illinois with buildings designed for grades 7-8 is attributable to the situation in that state which provides for separate high-school and elementary-school districts. The Illinois 2-year junior high schools are customarily attached to the elementary-school rather than the high-school district.

TABLE IV—GRADES FOR WHICH PRESENT TWO-YEAR JUNIOR HIGH-SCHOOL BUILDING WAS CONSTRUCTED, BY STATE

State	No. of Schools Responding	Grades								
		2-Yr. JHS	1-6 1-7	1-8	1-9	7-9	9-12 10-12	7-12	1-12	Other
Alabama.....	9	2	1	1		2	2		1	
Arizona.....	2	2								
California.....	5	2	2			1				
Colorado.....	8	1	1	1			3	1		1
Connecticut.....	2						2			
Florida.....	12		2		1	2	2	1	3	1
Georgia.....	8	2					3			3
Idaho.....	4					1	2	1		
Illinois.....	58	25	3	7	2	1	11		5	4
Indiana.....	24	5	2	3	1	4	7		1	1
Iowa.....	29	7		1			13	2	4	2
Kansas.....	6	1	1	1	1		1			1
Kentucky.....	1						1			
Louisiana.....	8	1				1	2		2	2
Maryland.....	4		1			1		1		1
Massachusetts.....	27	2	3	3	3	6	7			3
Michigan.....	27	4	3	1	1	4	5	1	6	2
Minnesota.....	1								1	
Mississippi.....	3	1					1			1
Missouri.....	5					1	3			1
Montana.....	15	6		4			3		1	1
Nebraska.....	7	1		1			4		1	
New Hampshire.....	2	1				1				
New Jersey.....	3					2	1			
New Mexico.....	6					2	1	1	1	1
New York.....	8	2	1				1	1	2	1
North Carolina.....	1									1
North Dakota.....	1						1			
Ohio.....	2						1		1	
Oklahoma.....	12	5	1	1		1	2			2
Oregon.....	17	4		4			6	1	1	1
Pennsylvania.....	3					2			1	
Rhode Island.....	1			1						
South Carolina.....	4	2					1			1
Texas.....	20	9	5			2		1	3	
Virginia.....	5	1					2		2	
Washington.....	4	1				2	1			
West Virginia.....	5	2		1	1		1			
Wisconsin.....	8	1		2	1		4			
Wyoming.....	9	2	1	2		1			2	1
TOTAL.....	376	92	27	34	11	37	94	11	38	32

TABLE V—REASONS GIVEN FOR ADOPTION OF TWO-YEAR JUNIOR HIGH-SCHOOL ORGANIZATION

¶ This table shows the answers given by principals to the questions: Was your 2-year junior high-school organization selected by design; that is, was it planned for? Or was it dictated by other factors? If the latter, what was the major factor?

¶ Replies from 119, or 32.7 per cent, of the 364 schools responding reveal that the 2-year junior high-school type of organization was selected on purpose and planned for.

¶ One-hundred, or 27.5 per cent, of the 364 respondents report that their 2-year junior high-school organization was dictated by building needs.

¶ Increased enrollment was the factor given by 59 or 16 per cent of the responding schools. It seems difficult to account for a significant difference between "building needs" and "enrollment needs." If these two items were put together, they would constitute the most commonly given reason for dictating 2-year junior high-school organization.

¶ Forty schools report that requirements or characteristics of system organization dictate the reason for the 2-year junior high school. This is particularly true of Illinois where separate school districts for elementary schools and high schools exist. It is probable that the data for Illinois under "By Design" and "By Organization" might well be combined.

¶ "Other factors" specified include change in school district due to community annexation, finances, school mergers, and earthquake (one school in the state of Washington).

TABLE V—REASONS GIVEN FOR ADOPTION OF TWO-YEAR JUNIOR HIGH-SCHOOL ORGANIZATION, BY STATE

State	No. of Schools Responding	Design	Building Needs	Increased Enrollment	Organi- zation	Other Factors
Alabama	9	1	5	3		
Arizona	1	1				
California	5	1	2	1	1	
Colorado	7	3	1		3	
Connecticut	2	1		1		
Florida	12	2		6		4
Georgia	8	3	1	1		3
Idaho	3		1			2
Illinois	55	27	5	4	16	3
Indiana	25	9	7	1	4	4
Iowa	28	10	8	4	4	2
Kansas	6	1	1	1	2	1
Kentucky	1	1				
Louisiana	8	1	3	3	1	
Maryland	4		2	1		1
Massachusetts	25	9	6	8		2
Michigan	24	8	9	3		4
Minnesota	1			1		
Mississippi	3		1	1		1
Missouri	5		4	1		
Montana	15	5	1	3	4	2
Nebraska	6	2	3		1	
New Hampshire	2		1	1		
New Jersey	3	1	1	1		
New Mexico	6		3	3		
New York	8	4	2			2
North Carolina	1		1			
North Dakota	1		1			
Ohio	2		2			
Oklahoma	12	4	6			2
Oregon	17	4	5	2	2	4
Pennsylvania	3			1		2
Rhode Island	1	1				
South Carolina	4		2	2		
Texas	20	7	7	3	1	2
Virginia	5	1	2	2		
Washington	4	2	1			1
West Virginia	5	4				1
Wisconsin	8	1	3	1	1	2
Wyoming	9	5	3			1
TOTAL	364	119	100	59	40	46

TABLE VI—LIST OF TWO-YEAR JUNIOR HIGH SCHOOLS REPORTING CHANGE OVER TO THREE-YEAR JUNIOR HIGH SCHOOLS, BY DATE ¹

<i>State</i>	<i>School and City</i>	<i>Enrollment</i>	<i>Building Designed for</i>	<i>Date of Change over</i>
Kansas	Great Bend JHS, Great Bend	722	9-12	1952
Texas	Wynn Seale JHS, Corpus Christi	1,175	7-9	1953
Texas	Robert Drissell JHS, Corpus Christi	800	7-9	1953
Texas	Douglas MacArthur JHS, Beaumont		Junior College	1953
Massachusetts	Lynnfield JHS, Lynnfield	420	7-9	1953
Florida	Ponce de Leon JHS, Coral Gables	1,700	7-12	1954
Pennsylvania	North Allegheny JHS, Pittsburgh	800	7-12	1954
Maryland	Elm Street JHS, Frederick	1,200	Senior High School	1955
Indiana	Main JHS, Mishawaha	680	7-8	1956
Iowa	Washington JHS, Ottumma	600	Senior High School	1956
Michigan	Woodrow Wilson JHS, Wyandotte	970	Elementary	1956
Nebraska	Sidney JHS, Sidney	400	7-9	1956
New York	Frank David Boynton JHS, Ithaca	1,175	7-9	1956
Pennsylvania	Ridley Township JHS, Folsom	620	7-9	1956
South Carolina	John H. Overton JHS, Columbia	1,050	7-9	1956

¹ These schools are not included in tabulations.

TABLE VII—NUMBER OF TWO-YEAR JUNIOR HIGH SCHOOLS CONTEMPLATING CHANGE TO ANOTHER TYPE OF JUNIOR HIGH-SCHOOL ORGANIZATION, BY STATE

¶ This table gives replies to the questions: Is your 2-year junior high school contemplating a change to another type of school organization by 1958-59? If so, to what type?

¶ Of the 370 replies to these questions, 220, or 60 per cent, of the schools report no change in organization contemplated by 1958-59.

¶ The remaining 134 schools indicate that a change in organization is contemplated. Of these, 115 plan to change from a 2-year to a 3-year junior high school, and one plans to become a 4-year junior high school, 16 are considering possible change, and 18 plan to make other changes of various kinds.

¶ "Other changes" include those from 6-7 to 8-9, from 7-8 to 8-9, from 8-9 to 7-8, from 7-8 to 6-8, from 6-8 to 7-8—which give the impression of improvisations needed to adjust to heavy grade enrollments.

TABLE VII—NUMBER OF TWO-YEAR JUNIOR HIGH SCHOOLS CONTEMPLATING CHANGE TO ANOTHER TYPE OF JUNIOR HIGH SCHOOL ORGANIZATION, BY STATE

State	No. of Schools Responding	Is School Contem- plating Change?			To What Type?		
		Possible	No	Yes	3 Yr.	4 Yr.	Other
Alabama	9		5	4	4		
Arizona	2		2				
California	5		4	1	1		
Colorado	8		6	2	2		
Connecticut	2		2				
Florida	12	1	6	5	4		1
Georgia	8		6	2	1		1
Idaho	4		3	1	1		
Illinois	57	3	45	9	8		1
Indiana	25	1	18	6	6		
Iowa	29	2	16	11	8		3
Kansas	6		5	1	1		
Kentucky	1		1				
Louisiana	8		4	4	4		
Maryland	4	1	1	2	2		
Massachusetts	28		13	15	11	1	3
Michigan	25	3	10	12	9		3
Minnesota	1			1	1		
Mississippi	2			2	2		
Missouri	5		3	2	1		1
Montana	15		10	5	5		
Nebraska	7	1	5	1	1		
New Hampshire	2			2	2		
New Jersey	2		1	1	1		
New Mexico	6	1	2	3	3		
New York	8	2	1	5	5		
North Carolina	1			1			1
North Dakota	1	1					
Ohio	2			2	2		
Oklahoma	12		7	5	5		
Oregon	15		8	7	5		2
Pennsylvania	3		2	1	1		
Rhode Island	1			1	1		
South Carolina	4		1	3	3		
Texas	19		11	8	6		2
Virginia	5		3	2	2		
Washington	4		2	2	2		
West Virginia	5		5				
Wisconsin	8		6	2	2		
Wyoming	9		6	3	3		
TOTAL	370	16	220	134	115	1	18

TABLE VIII—PREFERENCE FOR JUNIOR HIGH-SCHOOL ORGANIZATION EXPRESSED BY PRINCIPALS OF 2-YEAR JUNIOR HIGH SCHOOLS, BY STATE

<i>State</i>	<i>No. of Schools Responding</i>	<i>2-year junior high school</i>	<i>3-year junior high school</i>	<i>Other</i>
Alabama	9	3	6	
Arizona	1	1		
California	5		4	1
Colorado	8	1	6	1
Connecticut	2	1	1	
Florida	12	4	7	1
Georgia	8	4	4	
Idaho	3	2	1	
Illinois	58	24	33	1
Indiana	24	9	15	
Iowa	29	11	18	
Kansas	6	2	4	
Kentucky	1		1	
Louisiana	8	5	3	
Maryland	3		3	
Massachusetts	27	7	20	
Michigan	28	6	21	1
Minnesota	1		1	
Mississippi	3	1	2	
Missouri	5	2	3	
Montana	15	2	13	
Nebraska	7	2	5	
New Hampshire	2	1	1	
New Jersey	3	1	1	1
New Mexico	6	1	4	1
New York	8	2	6	
North Carolina	1	1		
North Dakota	1		1	
Ohio	2	1	1	
Oklahoma	12	3	8	1
Oregon	17	3	14	
Pennsylvania	3		3	
Rhode Island	1		1	
South Carolina	4		4	
Texas	20	7	10	3
Virginia	5	2	3	
Washington	4	3	1	
West Virginia	5	3	2	
Wisconsin	8	3	5	
Wyoming	9	5	4	
TOTAL	374	123	240	11

TABLE VIII—PREFERENCE FOR JUNIOR HIGH-SCHOOL ORGANIZATION EXPRESSED BY PRINCIPALS OF 2-YEAR JUNIOR HIGH SCHOOLS, BY STATE

¶ This table represents answers given by principals to the question: If you had the privilege of deciding the organization of your 2-year junior high school, would you choose a 2-year, 3-year, 4-year junior high school, or some other type?

¶ Of the 374 principals of 2-year junior high schools responding, 240, or 64.2 per cent, say they would choose a 3-year junior high-school organization.

¶ Preference for the 2-year junior high school is indicated by 123, or 32.9 per cent, of the responding principals.

¶ The "Other" category of preferences (11) includes 5 principals who would be satisfied with either a 2 or 3-year junior high school, 5 in favor of a junior high school with grades 6-8, and one uncertain.

ADVANTAGES AND DISADVANTAGES OF THE 2-YEAR JUNIOR HIGH SCHOOL

¶ This section reports the answers of principals to this question: In your judgment, what special advantage does a 2-year junior high school possess over a 3-year junior high school?

¶ Of the 298 principals of 2-year schools responding, 100 report that there is no advantage in the 2-year over the 3-year junior high school. Two principals claim that the 2-year school is inferior.

¶ The remaining 196 principals say that there is an advantage in the 2-year junior high-school type of organization. Although their comments are so varied as to resist tabulation, some common answer-patterns appear. These may be listed by priority as follows:

The 2-year junior high school provides:

Closer age-group a better basis for common learnings and interests (63 principals).

A smaller school, with advantages of better attention to individual needs and closer acquaintanceship (22 principals)

Greater opportunity for better homogeneous and social grouping (17 principals)

Better transition from junior high school to high school (14 principals)

More effective scheduling and programming procedures (12 principals)

Ninth grade better in high school (11 principals)

Easier to administer (7 principals)

Fewer disciplinary problems (6 principals)

Closer pupil-faculty relationship (teacher-pupil conduct) (6 principals)

¶ Mention is made by several principals of the freedom of the 2-year junior high school (grades 7-8) from units, credits, and college admission transcripts that complicate program and administration in grade 9.

¶ The items listed above represent comments from 171 or 87.2 per cent of the total of 196 principals reporting on special advantages of the 2-year junior high-school type of organization.

ADDITIONAL COMMENTS BY PRINCIPAL

¶ Space for additional remarks by the principal was provided in the letter sent to 2-year junior high schools. Ninety-seven principals wrote comments in this space.

¶ Their remarks pertain mostly to two items: junior high-school organization and school buildings.

¶ In regard to organization, 18 emphasize the desirability of having a junior high school with grades 7-9. These excerpts are typical:

Ninth graders belong in junior high school.

The 6-3-3 organization best bridges the gap between elementary and (senior) high school.

Ninth graders have social problems and developmental phases more in common with grades 7-8.

The 3-year junior high school is sound psychologically and sociologically.

I can hardly wait to have 3 junior high-school grades together.

¶ Twelve principals stress the desirability of the 2-year junior high school. Illustrations of comments are:

It's nonsense that a 2-year school cannot be a real junior high school.

I have had a 2-year junior high school for 31 years and am happy with it.

We had the ninth grade one year and it created many problems.

Experience has been limited to 2-year junior high school.

Nine principals express opposition to the 2-year junior high school, as for example:

We lose one-half of student body every year. This affects extraclass program and student council.

Two years are not long enough to establish a feeling of belonging and school loyalty.

Two years are too short a period from the standpoint of guidance.

The trouble with the 2-year school is you either over-test or under-test to get a true picture.

Two years are not long enough to know the student.

¶ Expressions on grades 6-8 by 7 principals reveal disagreement. Some feel apologetic about having grade 6 in the junior high school and hope that it soon will be returned to the elementary school. Others say they would like to have grades 6-8 in their junior high school.

¶ Several principals express a dislike for the 6-2-4 plan of schools organization. One comment is in favor of the 6-4-2 type.

¶ Several principals point out that in their state the junior high school is regarded as an extension of elementary rather than secondary education and that state school equalization-fund disbursements to school districts follow this pattern.

¶ Sixteen 2-year schools report that they are now, or soon will be, engaged in school construction which, when completed, will enable them to have a 3-year junior high school. Four say their system will shift to 6-3-3 plan by September 1958; one to 6-2-2-2.

¶ Several principals report overcrowding of buildings with no plans under way to relieve it. One commented that the system is committed to the 8-4 plan and will build new 4-year high schools only.

¶ Two comments are quoted in full: "A new senior high school is being built and our junior high school hopes to occupy the old building." "Many junior high schools have had to fit their curriculum to outmoded buildings. Why shouldn't students of this age level have benefits of a building constructed to meet a modern curriculum?" (Table IV shows that 75.5 per cent of all 2-year junior high schools responding to our inquiry now occupy buildings *not* originally constructed for a 2-year junior high school.)

¶ Miscellaneous comments are made on such varied topics as transportation, departmentalization, and legislative restriction. The principal who writes "I believe college entrance credits should be counted only in the last 2 years—11-12"—touches upon a controversial matter: The potentially restrictive effect of college admission units on curriculum development and experimentation in the ninth grade of the junior high school.

¶ Several principals explain that their preference for a particular type of junior high-school organization is not likely to be implemented. Community patterns of school organization are so fixed by tradition and local factors, including size of district, cost of transportation, and financing of education, that the likelihood of change is remote.

Inquiry Form

NATIONAL ASSOCIATION OF
SECONDARY-SCHOOL PRINCIPALS

1201 Sixteenth Street, N. W., Washington 6, D. C.

Paul E. Elicker, Executive Secretary

COMMITTEE ON JUNIOR HIGH SCHOOL EDUCATION

The Two-Year Junior High School

1. Grades in school, 6, 7, 8, 9. (Please circle)
2. Was your two-year junior high-school organization selected by design?

 OR was it dictated by other factors? (Please specify) _____

3. How long has your school been a two-year junior high school? _____

4. Is any change in organization contemplated by 1958? Yes _____ No _____

If yes, please check: To a 3-year junior high school _____

To a 4-year junior high school _____

Other (specify) _____

5. Was your present building constructed for a two-year junior high school? Yes _____ No _____. If not, for what grades was the school built? _____

6. In your judgment, what special advantages does a two-year junior high school possess (as contrasted with a 3 or 4 year junior high school)? _____

7. If you had the privilege of deciding the organization of your junior high school, would you choose (please check)

(a) a 2-year junior high school _____

(b) a 3-year junior high school _____

(c) a 4-year junior high school _____

Additional remarks:

Estimated Enrollment

Name of School _____

September, 1956 _____

Signature _____

Title _____

City _____

State _____

A Science Career: How the High School Affects the Choice

MAURICE FINKEL

DURING the spring of 1956, a survey was instituted in an attempt to discover why more high-school students were not interested in entering a science career. To implement such a study, questionnaires were forwarded to secondary schools of various sizes and locations. Returns were made by thirteen schools in Colorado and by eight other schools located in different geographical sections of the nation. Participating in this study, were twenty-one secondary-school principals, sixty-five science teachers, twenty-four guidance counselors, and 594 senior students. The students who took part in this study were chosen from classes which would best provide a typical picture of the average student. In addition, for purposes of comparison, fifty-six college students who were enrolled in the basic communication courses at the University of Denver returned similar forms.

As a result of personal contact with many principals, in addition to the information provided by the questionnaires, it appeared that a large proportion of them: (a) were not too well informed in regard to the nation's great need for personnel trained in science; (b) were more interested in keeping poorly qualified students out of science areas than in guiding potential scientists into the field; and (c) were apparently quite blind to the academic inadequacies of their science teachers as well as to the inadequate science teaching situations that were due to overcrowded laboratories, old science texts, and the lack of supplementary science activities. They seemed satisfied that as long as the physical sciences and mathematics were offered each year, or on alternate years, that they were available to the students who desired them. Many of these schools offered such courses only once or twice a day. The result was that they often conflicted with other important or desirable courses and because of this, many students did not have the opportunity to take these subjects.

The questionnaires returned by the science teachers revealed an interesting situation. There was evidence indicating that a large proportion of them: (a) carried at least two periods of supervisory duties each day; (b) were in many cases teaching non-science subjects; and (c) were often teaching a science in which they had not specialized and, in many cases, had not even an undergraduate minor. Few of these teachers had taken

Maurice Finkel is Professor of General Science at Northeast Missouri State Teachers College, Kirksville, Missouri.

any graduate work in either their teaching field or in any related science or mathematics. However, most of them had taken some graduate study in professional education. Most of them did not provide formal laboratory periods along with their regular class instructions.

The guidance counselors were all quite educated in their speciality, but, for the most part, had indicated little interest in science. Most of them carried, in addition to counseling, both teaching and supervisory loads.

A large majority of the high-school students who participated in this survey were well aware of the: (a) inadequate facilities, space, and time spent in the laboratories; (b) and of the need for more supplementary science activities and for modern science texts. The better science students complained that they were constantly retarded by the slow pace set by the teacher for the mediocre student. Many of these students recognized the academic unpreparedness of their teachers.

The most interesting information presented by this survey was the way these students regarded the subjects which they had studied when they were in grammar school. Table I indicates the percentage of students who found the respective grade school subjects either interesting or uninteresting. From it may be seen that more students found both science and arithmetic more interesting than most of the other subjects.

Associated with this, Table II shows the grade level during which students changed their minds about entering a science career. Over one third of them had at one time been interested in science as a vocation, but had since changed their minds. Apparently a large proportion of all students have a natural interest in science, but some place along their school career this interest is dampened. The problem then may be not just to interest students in science but to keep their native interest in this area alive.

TABLE I. STUDENT INTEREST IN ELEMENTARY SCHOOL SUBJECTS

Subject	Per Cent of Student Sample ¹	
	Interesting	Uninteresting
Reading	67.5	17.5
Arithmetic	62.0	26.0
Science	57.2	20.0
History	54.4	33.3
Geography	52.0	28.3
Music	51.7	22.9
Spelling	51.5	30.3
Writing	40.4	32.8
Art	37.2	27.3

¹Sample based on 594 high-school senior students.

TABLE II. GRADE LEVEL DURING WHICH STUDENTS CHANGED THEIR MINDS ABOUT CHOOSING A CAREER IN SCIENCE

<i>Grade level</i>	<i>Per Cent of Student Sample¹</i>
1-6	1.9
7-9	10.6
10-12	25.1
Total	37.6

¹Sample based on 594 high-school senior students.

Most of the students did not take more than two courses each in science and mathematics while in grades nine through twelve. The more science and mathematics a student took, the greater seemed his interest in science as a career.

There was general agreement among the principals, science teachers, guidance counselors, and students that the primary reasons why students did not take more science while in high school were because: (a) science was too difficult and involved too much mathematics; (b) the student's background in science while in elementary school had been poor and uninteresting; and because (c) the school offered so many important and desirable courses in competition with science that many students found it difficult to make the proper choice. However, there was some evidence that a much smaller proportion of the students avoided taking science because of its difficult nature than was implied by the principals, science teachers, and guidance counselors. The exacting nature of science was not the final reason why many high-school students avoided this subject.

What may be done to keep qualified students interested in science? A large part of this answer lies in what is taught and how it is taught.

The secondary-school curriculum should include at least general science, biology, physics, chemistry, two years of algebra, geometry and solid and spherical trigonometry for all students interested in a science career. At least one period each week should be set aside for laboratory work or demonstrations for each science course offered. Laboratory facilities and space to work must be provided if the time spent here is to be meaningful. Modern science texts must be available. Nothing is so out-of-date as an old science text. Supplementary science activities should be instituted. Science assemblies with good speakers and films; field trips to places of scientific interest including museums, industry and natural areas; and science clubs will enliven and keep interest high.

How the science is taught involves the teacher, his background in the science taught, and his psychology of teaching. The undergraduate preparation of elementary school teachers should include some course work which would acquaint them with fundamental aspects of general biology, human anatomy, physiology, conservation of natural resources, physics, chemistry, earth science, and astronomy. Wherever possible, they

should participate in laboratory work in order for them to develop an ease in the performance of classroom science demonstrations. Some background in the history of science and science teaching methods would be helpful. They should have at least one course in general mathematics as well as a methods course in teaching arithmetic.

The secondary-school science teacher should have individual course work in botany, zoology, human anatomy and physiology, physics, chemistry, earth science, and astronomy as well as college mathematics up through the calculus. Upon the completion of the basic science courses, he should have some advanced work in at least one science area to the level where graduate work in the field may later be taken. Courses in the history of science and secondary science teaching methods would also be helpful.

Since many of the science teachers have been weak in their teaching field, the graduate schools of the nation must institute a different program designed specifically for such teachers. A master of science teaching degree program would include some elementary courses of science for graduate credit for those teachers whose science background is too weak for the regularly designed graduate courses in science. A refusal to do this would only send these teachers who need the more basic courses in science back to the schools of education for a graduate program including only courses in professional education. Certain courses in professional education may be fitted into the master of science teaching degree program. However, most of the courses for this degree should be completed in the teaching field of the individual concerned.

In a similar fashion, the graduate school could offer a doctor of science teaching degree for the student whose prime interest is college science teaching. The acceptance of such a degree for this purpose would reduce the number of college teachers of science whose prime background and interest has been in research. The person teaching college science should be specially prepared for this vocation and not use it as a means to do basic research. A great many of these researchers in college teaching are notoriously famous for their inability to teach the subject they know so well.

The graduate program of the elementary-school teacher should include some work in science depending on the background of the individual. Where the elementary-school teacher needs basic work in the fundamentals of science, such courses should be available for graduate credit toward the master of arts in elementary education.

In order to attract better qualified people into science teaching, it may be necessary to provide them with a subsidy similar to that given teachers of agriculture. The position could also be made more attractive if the science teacher were relieved of non-teaching extra duties. The extra time would then be applied toward the building of a laboratory and a supplementary science program. The salary of the science teacher should be determined by merit rather than by time in service alone. Criteria by

which merit may be partially determined are: (a) the extent of the education of the teacher including that in this teaching field; (b) the nature of the science program developed by the teacher in his school; (c) the contributions made by the teacher to science and science education organizations and journals. To help evaluate the background of the teacher, a neutral organization, such as the U. S. Office of Education, could sponsor standardized examinations in various science and mathematics teaching areas.

Able science teachers should not be retired or refused employment because of age. Unqualified teachers should not remain in teaching because of tenure. They should be expected to improve their background within a reasonable period of time or be recommended for dismissal by the school board.

Elementary and secondary schools should have some one on the staff whose education in the sciences would qualify him to be the school's science counselor. The duties of such a person would be to organize the science program at each grade level (particularly in elementary school) and to be that special person to whom science interested students may go for counseling and guidance.

With the aid of local, state, and Federal agencies, both public and private, students interested in science should be helped to pursue their studies through undergraduate, graduate, and even post-graduate school should their potential extend that far. In a similar manner, secondary schools, colleges, and universities should be helped to establish programs which would attract top-flight scientists back to the schools for instruction. When the schools place on their staffs scientists who are teachers and not just science teachers or researchers, a large part of the problem of interesting students in science careers will be solved.

A NEW PUBLICATION ON CAREERS

Your Future Occupation is a new guidance pamphlet that will be found helpful to counselors in their work of assisting students to select a career. This publication is composed of 4 printed pages (8½" x 11") and will appear 20 times during the school year—the second and fourth Mondays of each month from September through June. It is composed of accurate, up-to-date information on job opportunities, training requirements, and educational guidance. Articles in the publication are prepared by authorities in the field. For additional information, prices of quantity subscriptions, and address of the publisher see the advertisement on the inside front cover of this issue of THE BULLETIN.

The Gifted Student in the Composition Class

MRS. RUTH REEVES

IN THE first seat of the middle row of the senior high-school composition class sits a boy whose writing style may be more sophisticated than that of his teacher, who understood the intricacies of sentence structure the first time they were presented, whose mind, gone stale and a little sour from being out-of-training, needs a problem with which to grapple. Behind him sits a girl who can't tell a verb from an adjective and who, having nothing to say that she considers significant, is indifferent whether she says it in a fragment or a sentence.

Which student's need is to control the activities of the class? Or should the needs of the other thirty-three, being neither so this or so that, be the deciding factor?

A search has been made for an approach to the teaching of composition and grammar that will challenge the gifted student. It is believed, however, that the techniques suggested here will be likely to be challenging to all students according to their capacity for being challenged. These suggestions, contributed by Houston teachers, deal with class activities (1) in studying mechanics and usage, (2) in seeking to enlarge the vocabulary, and (3) in writing for various purposes.

STUDYING MECHANICS AND USAGE

Although repetitious drill may bore the rapid learner, he sometimes needs to refresh his knowledge of technical English. The efficient teacher wishes to give him only the drill he needs.

Assigning the rapid learner more challenging work. Students may be given a diagnostic test over the skills to be studied. Those who require no review of grammar and usage may read, either in another part of the classroom or the library, books of recognized literary merit, on which they will do some type of reporting; engage in research projects involving reports; or undertake some type of creative writing.

Holding class members responsible for their own learning of a skill. Recently a Houston teacher, whose class was largely composed of rapid learners, decided that he was doing too much spoon-feeding. When the time came for the class to work on new material in punctuation, he assigned the students to proceed with the study on their own, using the textbook as guide. He would answer any questions they cared to ask, but on a certain day there would be a test.

Mrs. Ruth Reeves is Supervisor of English in the Houston Schools, Houston, Texas.

During the study period no questions were asked and attention to the assignment seemed somewhat desultory. As a result, scores on the test were extremely low.

Since the majority of the members were really rapid learners, they settled down to work and asked questions, which the teacher answered in detail. Almost without exception scores on the second test, the one for which results were recorded, were high.

In an evaluative discussion following this experience, many students admitted feeling that their understanding of the subject matter was not the teacher's responsibility but their own, that they had for the first time learned how to punctuate. The same approach can be used with other types of material.

Teaching more complex matters as the need arises. The teacher may call the attention of gifted students to more complex aspects of grammar and composition whenever they will best benefit from such a study. For example, coming across an unusually well-balanced sentence in a paper or a report, the teacher may write it on the board and call attention to its excellence. When individuals show the need of improving some aspect of style, the teacher may privately suggest a type of exercise or activity that will help in self-improvement. Before the writing of a theme, he may select one or two aspects of style for special attention by advanced students who will have no problems with ordinary writing.

Thus the teacher of grammar and composition is able to individualize instruction when teaching mechanics and usage so that the highly superior student will not be held back by the review and drill essential to others.

ENLARGING THE VOCABULARY

Most high-school students are capable of becoming interested in words; the superior student, particularly, enjoys adding to his vocabulary.

Using vocabulary test at the beginning and end of each semester. Tests given at the beginning of each semester and again at the end give students an idea of the size and growth of their vocabulary. Such a device can stimulate the superior student to work on his own initiative to develop a larger vocabulary through being alert to new words encountered in reading and listening.

Studying new words in context. As a weekly assignment, students in one teacher's class handed in, properly mounted on notebook paper, one or two clippings from periodicals, each with a new-to-him word underlined and with an explanation as to pronunciation, origin, and definition, and with an original sentence illustrating the use of the word. For example, the headline "Top Congressional Leaders Favor Depletion Allowance" was pasted on a page and followed by this information: "depletion—de-ple-shun, L. *depleo*, *depletum*, to empty out; act of diminishing. The depletion of the food supply meant that many would starve." Students in these classes kept notebooks, of which the clippings and the definitions were an important part.

Bringing to the attention of the class books that deal with words. In some classes books are kept available for use by students who finish other work early. Among books recommended for browsing are Maxwell Murmberg and W. T. Rhodes' *How To Build a Better Vocabulary*, G. C. Merriam Company's *Picturesque Word Origins*, Wilfred Funk and Norman Lewis' *Thirty Days to a More Powerful Vocabulary*, and Henry I. Christ's *Winning Words*.

Studying prefixes, suffixes, and word families. One Houston teacher places on the board each week a different word family. The words are discussed throughout the week and used in sentences. For example, the following might remain on the board all week:

L. *torquere*—*tortum*—to twist

retort—to twist back a reply, to turn your opponent's argument against him

distort—to twist out of shape

contort—to twist together

contortionist—one who can twist his body painlessly

extort—to twist out by force

nasturtium—nose twister, flower so named because of pungent odor

torture—a twisting of parts of the body

tort—a legal term for a special kind of wrongful act

tortuous—full of twists, winding

The gifted student may expand such word families as part of his program for independent study.

Using other devices to teach vocabulary. Many other devices that are of particular interest to the superior student have been used to stimulate interest in vocabulary development: (1) One Houston teacher suggests to his classes, in a spirit of informality and some humor, words that may be used for specific occasions—an out-of-town trip to a football game, for example. (2) Another teacher often uses the first five or ten minutes of his class time thus: one person starts a "conversation" by making a remark using one of the words on the week's vocabulary list, and the next person answers using another. The trick is to keep the comments following each other logically. (3) Students may be asked to illustrate the use of an interesting word through writing a paragraph. The following paragraph is a result of such an assignment by a Houston teacher: (4)

Of all possible adjectives, none describes my fourteen-year-old brother better than *intrepid*. His undaunted spirit does not hesitate suddenly to attack me for the sheer pleasure of physical combat in spite of my ten-inch height advantage and a fifty-pound difference in our weights. He delights in scaling trees and clattering about the roof of our house. He thinks nothing of coolly patting the largest and fiercest-looking dog on the head while I am detouring an entire block to avoid the self-same dog. What is more, he actually looks forward with bright-eyed anticipation to dances; at his age even the thought of venturing onto a dance floor with a girl was agony for me. In short, my brother's intrepid curiosity, spirit, and healthy outlook make him exactly what a fourteen-year-old boy should be.

Vocabulary tests are featured in *Reader's Digest* and other periodicals. These tests may be taken, scored, clipped out, and mounted in students' notebooks.

Through a variety of such devices, teachers encourage the extension of vocabulary in grammar and composition classes. For the gifted student, this area provides many opportunities for individual study in terms of greater maturity and range of interest.

WRITING FOR VARIOUS PURPOSES

No type of work in English lends itself better to meeting individual differences than does writing. As the teacher plans assignments in exposition, letter writing, and creative writing, he includes challenging opportunities for the superior student.

Providing a range of experiences in expository writing. Skill in exposition is particularly needed by all professional and business people—indeed by all adults and by serious students. In promoting skill in exposition, the English teacher stresses the value of thought, structure, development, and effectiveness of expression.

First, the teacher shows the student that the interpretation of his own experience is the best basis for gaining skill in exposition. To demonstrate the interest value of the student's own experience, one Houston teacher asks her class for the first writing assignment of the term to make a simple list of "Things I Like," "Things I Dislike," "Things I Would Change," "My Ten Earliest Memories."

The teacher no doubt demonstrates that the list may be both serious and commonplace; "Things I Like" may be hushed organ music in a quiet church, walking barefoot in cool sand, or even biting through a crisp raw carrot. The object is to be introspective and honest—not imitative. If good rapport has been established in the class, the lists may be read the following day; comparison with the lists of other students makes the perceptions keener. The gifted student is usually particularly sensitive to this identifying of his own experience, and he may learn to say with Socrates that "the unexamined life is not worth living."

As a second step, the teacher mentioned above asked the students to write a theme on such a subject as "This I Remember" or "This I Believe." Making this assignment with great care, the teacher draws illustrations from his own experience and reading. He may describe a personal memory. He may relate such an incident as the following: Somerset Maugham at the age of seventy was asked to read for recording the first two chapters of his best known novel, *Of Human Bondage*, which tell the story of his unhappy boyhood. Mr. Maugham had not read the book since finishing the writing of it many years before. When he began to read the words aloud for recording, he was so overcome that he could not go on. By such means, the teacher suggests that all human beings have times that are remembered with emotion. The tone of the

writing will be set by this preliminary discussion for earnestness or humor, depending on the moment to be remembered, or the belief to be stated.

Some of the themes are read in class, either by the student himself or by the teacher with the student's permission. Here, perhaps, real thinking begins. As students hear what other students remember and believe, their own memories and beliefs are clarified. The superior student will sometimes be so stimulated by discussions growing out of the reading of themes that he will write other unassigned papers, replying to ideas of other students. He learns that writing his ideas clarifies them. "I didn't know I believed that until I wrote it down," said one.

Having been led to examine his own experience, the gifted student must be encouraged to apply this interpretive ability to general situations and to knowledge gained by reading.

The teacher of the gifted is always on the lookout for original thinking. Perhaps teacher and class will express appreciation of the thought; perhaps they will challenge it as illogical. The point is that they must not pass over it with indifference. By giving respectful attention to original thought, the teacher proves to the gifted student that his own ideas have value.

The teacher, however, cannot wait for original thoughts to be expressed; he seeks ways to evoke them. In a class period following a thought-provoking speech in assembly, the teacher may ask: "Do you agree with Mr. Smith's statement that the most important time of your life is that spent in school? What does he mean by the word 'important'? In what ways do you consider that your schooling will remain important to you the rest of your life? Do you think that there is any disadvantage in thinking of it as the most important time?" If the class discussion is spirited and ideas flow, the teacher may say, after a time, "Write a paragraph either summing up the class reaction to the talk or giving your personal reaction." Always, the writing clarifies and sharpens thinking. The reading of high-school students, too, abounds in material about which the teacher may ask challenging questions.

Before doing any piece of expository writing, the high school student should be taught to decide exactly what he wants to say about the subject; he should formulate a question that he will answer or a statement that he will seek to prove. The student with a mature mind should not be satisfied with too obvious a question or statement, but instead study his material until he can interpret it thoughtfully. For example, he will write his paper not to prove the obvious truth that Mark Twain is a great American humorist, but that we still laugh at Mark Twain because his humor is somehow as modern to us Americans as that of George Gobel, Bob Hope, or Jack Benny. Then he must, of course, prove his statement as definitely, as fully, and as entertainingly as possible. The point is that he must always interpret his material by means of his own thinking.

At first, before the student has formulated this basic question, he may have several questions in mind—questions that will force him to interpret the material, not such questions as “What were the main events in this author’s life? What books did he write? What did the critics say about him?” but such questions as these: “From what point of view is the author writing? What kinds of people and situation interest him? What periods of history? Are his characters acting as real people act, or is he making them behave in a certain way to prove a point? If so, what is the point? Is this point different from the one he was proving in the last book of his that I read?” From such varied questions as these, the gifted student, it is hoped, will eventually find the one sentence or question that will be the keynote of his paper. He does not arrive at this final statement without consultation with the teacher or with the combined thinking of other mature students.

The student’s thinking does not stop as he organizes and develops the ideas for his paper; it must continue through the final summing up. This preparatory thought, however, which is intensive and sustained, can probably be expected only from the gifted student, and from him only after he has been prepared for it by means of an apprenticeship of examining and interpreting his own experience and of analyzing statements and attitudes of others in order to discover and identify his own.

Sometimes the gifted student, once the purpose of his paper has become clear in his mind, will see at once the whole pattern; he knows what he wants to do and, therefore, without further instruction understands how to do it. The best organization is that which is shaped by the nature of the material.

Usually, however, the student’s first plan is not without blemish; there will be some room for improvement. If possible, the teacher will take time to deal first with those plans that need only a slight polishing, so that the student writer is not held back by a comparatively elementary study of organization by the rest of the class.

Several kinds of help in organizing may be needed by the gifted student. He may have seen in his own mind the form of his material, but he may have failed to consider his reader adequately. For example, he may have presented subtopics in the wrong order; perhaps the point most difficult to understand—and hence the one most interesting to the student—the one which depends on others for comprehensibility, has been placed first in the outline. The teacher may suggest that the writer select some person he knows to picture as his reader, and that he make his plan comprehensible to that person. The writer must learn the trick of building to the significant point, so that the reader follows his lead without confusion.

Another mature student who will need special help in organizing is the one to whom ideas come already formed. The idea has come to him as a whole, and the prospect of breaking it down for the sake of making it explicable may become boring, and his writing reflects his boredom.

The teacher, instead of insisting on a conventional breakdown, may select words or phrases from his stated problem and ask for explanation. As the writer seeks to make clear his meaning, the teacher may begin to jot down certain of his expressions that may serve as subpoints. When the student is shown these jottings, it is hoped that he will have one of two reactions: either "Yes, I see what you mean" or "No, that is not at all what I had in mind; I'll do it myself." Sometimes the only solution to his difficulty is to suggest that he go ahead and write his theme. If his ideas do not take shape as he writes, perhaps the other students will convince him of his need for better planning when he reads them his completed theme.

Now and then a gifted student finds exactly the same difficulty in organizing as the average student. Since he usually has more ideas to organize, his difficulty is actually more burdensome, and the result of inadequate organization is a greater chaos. The gifted student may need to perform, along with the rest of the class, the exercises in the textbooks for improved organization.

The high-school teacher of the gifted student recognizes that many brilliant adults are hampered because they cannot make themselves clearly understood by thinkers less rapid than themselves. He tries, therefore, to understand exactly how much or how little help in organizing the student needs, and to provide that help.

Once the student writer has thought through his subject and organized his ideas, he is ready to present his material to the reader in a way that will affect his thinking or entertain him. In this activity, too, the teacher may wish to give special attention to the gifted student.

First, before the writing of a major theme, the whole class may have been given some practice in increasing the interest of their writing through being concrete. Perhaps the teacher has read the class selected sentences by skillful authors and has helped students to analyze the picture-making details. He may have given the class sentences that are general and asked that they be made specific. Perhaps this preliminary activity has taken place when the class was getting ready to do descriptive or narrative writing or even to write poetry. But at times description and narration are also necessary to expository writing. However, even the gifted student often has to be shown individually how to apply to expository writing the skill gained through exercises in other kinds of writing.

No other method of teaching, of course, takes the place of individual conference. For this reason, much student writing takes place in class. Once the writing is under way, the teacher often takes a seat at the back of the room and places another chair near; there he will confer with gifted students as well as with others. He takes time to listen or to read rough drafts. He shows the writer certain terms that need to be defined for the reader or sentences that are too general to be effective. He points

out examples of repetition, of redundancy, for often the gifted student, through sheer facility with words, uses so many that he spoils the effect.

Perhaps, on the other hand, the writer is too terse. He puts down the meat of his thoughts only, without building up to them in any way. Without disparaging the ability to be concise, the teacher tries to show the advantages of preparing the reader's mind for key sentences. The writer may use contrast or comparison. By demonstrating to the reader what your subject is *not*, the student may be told, you make him more strongly aware of what it *is*. "Notice how in a Western movie," the teacher may say, "the virtues and the valor of the good characters are made brighter by contrasting them with the vice and the cruelty of the villains. You can apply this same principle here. What is the opposite of this condition you describe and what effect would it have?"

Then, when the rough drafts are finished, some of the themes will be read aloud before the final copies are made. A class may divide into groups and read to each other, or a few of the themes may be read to the class as a whole. (Three or four questions written on the board will help students keep in mind the points they are to evaluate.) In sessions of reading aloud, students help each other. The gifted student will of course help the less gifted, but often the student whose rating is only average will have a flair for structure or tone or specific development; the gifted student profits from his criticism. Sometimes the teacher may read themes aloud without giving authors' names; hearing work read aloud in class makes self criticism possible.

Time will not permit giving this type of treatment to every piece of writing. However, the high-school student, and especially the gifted student, feels more strongly the importance of competence in written composition if two or three times a semester the writing of a theme is given such emphasis.

Providing a range of experiences in letter writing. Writing of business and social letters is part of the English course of study in each year of the secondary school. What special study of this type of writing should be made by the gifted student?

Writing business letters that are pointed, concise, and courteous, and social letters that are gracious and friendly are arts in themselves, and perhaps the gifted student will find enough satisfaction in becoming really adept in these arts.

If teachers feel that some extra writing talent along this line may be developed, they may assign a student to make a study of famous published letters, like those of Lord Chesterfield, and report on them orally or in a theme. Or the gifted student may write letters that call for developing some special skill in human relationships—writing an apology, writing a letter designed to correct some fault in the receiver without wounding his vanity, demonstrating the differences in the ways of describing an incident to a four-year-old child and to a grandparent.

If the student is imaginative, he may write a letter such as might have been penned by a fictional or historical character. Or he may create an imaginary character of his own and show his basic personality traits by means of a letter. This letter may, of course, develop into a short story.

It is possible, however, that allowing the imagination too much play in letter writing activities may detract from the sober fact that adults have many occasions for writing in their own business and social lives; the gifted student should perhaps devote his energies to sincere and effective expression in real notes and letters.

Providing a range of experiences in creative writing. Exposition and letters can be considered creative if the author has put his own ideas into his own words. Usually, however, the term refers to description, narration, the informal essay, the vignette, or poetry, written for their own sakes. The superior student will profit from such experiences in writing creatively as these: writing descriptions with emphasis on imagery, writing verse, keeping a journal, writing autobiographical sketches, and writing short stories.

Some teachers give as the first writing assignment of the year the describing of something very definite: "Make the class see something you saw on the way home from school" or "Describe a tumbler of water so that we can really seem to see it." The ability to describe in sharp detail is the basis of most readable writing. The teacher may point out that, since an individual receives impressions through his five senses, the writer must make the reader imagine he is using these senses. The teacher asks for a sentence that will make the reader *see* something imaginatively (color, shape, size, space, motion), another to make him *hear*, one to make him *smell*, one to make him *taste*, and one to make him *feel*, (through the sense of touch). These sentences are read aloud in class to be evaluated.

Such sentences as these may be written: "The thunder is like a bowling ball rumbling down the alley, smashing into the pins," or "The wind crackled going through the trees, hitting the rigid leaves," or "I grew sleepy listening to the unceasing drone of a fan blowing warm air across a plushy feather bed."

Experience in selecting detail and working for color and sense impressions will improve the quality of all students, including the gifted. Such writing may lead into the composing of verse. Most high-school students are sure that they cannot write verse, but led step-by-step by a determined teacher, many of them become passable poets. Once having written verse, they become more appreciative of great poetry. The gifted student should certainly try his hand at writing verse.

One Houston teacher takes the first brief descriptions written by her students—she has asked for the creation of a mood through description—and tries to find a few words in a phrase that are, by accident, anapaestic, trochaic, dactylic, or iambic. If she is successful in discovering one in a particularly apt description, she points it out to the writer and suggests that he make the whole description fit into the pattern of verse form.

Other teachers suggest that the vivid descriptive bits may become free verse, and then begin the teaching of regular verse more directly. The first line of several couplets may be furnished and students asked to write the second line, using the same rhythmical structure and rhyming end words. After the couplets are completed, read, and discussed, the class may be asked to write a simple ballad, telling a portion of a story the writer knows or relating an incident in his own life. Warning is made that the story must be kept simple.

It is the enthusiastic but discriminating reception of these efforts by class and teacher that make the poet. Gifted students flourish, usually, on constructive, specific criticism and appreciation.

After the class has had some experience in writing rhymed verse, the gifted student may be given patterns—sonnets, various French forms (rondeau, rondel, villanelle, triolet, cinquain), limerick, and different kinds of lyrics. The special qualities of these forms and also of free verse are pointed out. Then time is given in class for the writing of verse—if not for the first writing, for the polishing. Again, the verse must have an audience, appreciative but critical. The writer must be made to feel that his work is important enough to be rewritten until it is right.

In Houston, interest in creative writing is encouraged by an annual Anthology, published by the Houston Council of Teachers of English, which contains the best writing submitted from secondary schools.

Keeping a journal is another activity that may serve as a creative outlet for the gifted student. The person who every day writes a description of something that impressed him or his comment on something he has read or heard is the person who is learning to observe more appreciatively, to think more deeply, to write more forcefully. One teacher asks class members to keep such a journal for a few weeks. To make the project truly educational, she reads the journal frequently and writes comments. Often the journal's next entry after her reading is an answer to one of her comments. Again, it is the discriminating audience that stimulates the thoughtful writer.

Writing a short story appeals to the imagination of most teenage students, but usually only the gifted student is a successful short-story writer. Such assignments as the following, rather than general ones, have resulted in interesting writing: "Write a description of a place in such a way as to suggest the kind of action that would be expected to happen there. Then put a person in the setting . . . Now what did happen?" "Write a character sketch emphasizing the dominant characteristic of the person you are describing . . . Now put that person into an imagined situation that will test this quality to the utmost."

A high-school student writing a short story will usually want to confer with someone from time to time, preferably the teacher. Some teachers have tried allowing small groups to work together on such a project. Some teacher guidance, however, is certainly advisable.

There are other creative activities that may be occasionally performed by gifted students; he may help plan assembly programs, he may write skits, perhaps, for a home economics department style show, or help with speeches that require special care. One group of students wrote a set of devotionals that are being used in the school each morning.

The best writing by superior students no doubt always comes from the class small enough to be conducted as a seminar. In a heterogeneous class, the teacher may be the only one from whom the creative writer can get the help he needs; in the homogeneous class everyone helps. Students find audience of their peers—an audience whose appreciative and critical faculties are constantly being sharpened through use—an ideal one. Students with superior ability who have gained facility in expression through these diversified activities in writing and criticism in their high-school composition classes are ready to do superior work in college and after college. Besides, their high-school lives have been made more meaningful.

WORKSHOP ON GOOD CITIZENSHIP

The Williamsburg Student Burgesses will hold a workshop on good citizenship in Williamsburg, Virginia, next February 9 through 12 with the endorsement of the National Education Association. A new educational event for young people by Colonial Williamsburg, the Student Burgesses will consist of public, private, and parochial high-school students who are the presidents of 54 state associations of student councils affiliated with the National Association of Student Councils. The NASC is a major activity of the NASSP, a department of the NEA. This workshop on good citizenship has been developed in cooperation with Gerald M. Van Pool, Assistant Secretary for Student Activities of the NASSP.

The group will be joined during its sessions by secondary-school students from some 30 foreign countries who are members of the New York Herald Tribune Youth Forum. A panel of American authorities will serve as discussion leaders.

Main purpose of the Williamsburg Student Burgesses will be to help prepare young people for their adult obligations as American citizens. The program will emphasize better understanding of the American political system and democratic heritage. The historic atmosphere of restored 18th-century Williamsburg, source of many of America's democratic ideals, will be used to dramatize the continuity of public responsibility from the days when George Washington and Thomas Jefferson met here as Burgesses to the present time.

With foreign students taking part, the workshop will also be devoted to describing how democracy works in different countries throughout the world. The program of the Williamsburg Student Burgesses will include discussion sessions, talks by American authorities, and historic tours.

A Good High School Program in French and Spanish

IMOGENE MONTGOMERY

THE American high school today has growing pains. Youth and his education are much in the public eye. Almost daily someone writes or talks about the lack of better education in one field or another or the need for it. The country has been warned that American education is not producing enough mathematicians, scientists, yes, and linguists. The conservationists are concerned with the educational waste of the gifted or talented children.

Administrators and high-school teachers are all searching for answers to discipline problems, for ways to prevent dropouts and failures, for better motivation for pupils, for the right curriculum—in short, for a good high-school program that will prepare pupils for their future educational, recreational, and vocational needs.

Everyone who reads knows the barrage of *pro* and *con* criticism the book *Why Johnny Can't Read* let loose on the reading program. That controversy, if studied, discloses problems pertinent to every school program and especially to the language program. Above all the criticism reveals that what Johnny was like had a great deal to do with whether or not he wanted to learn anything, was able to learn anything, or did learn anything. It also reveals that no single method or approach works for every Johnny in the class.

Whether or not high-school teachers like it, no effective program can be planned without consideration of Johnny—of his needs, of what he has learned, of what he is willing to learn, or of what he can be motivated to learn. Today's average teenager is a product of a more child-centered family life and a more pupil-centered classroom. He is conditioned to personal consideration, to working in groups, and to pupil activity.

It is much more difficult for the high school, a larger unit than the elementary school, to be pupil-centered. It is also much more difficult for the high-school teacher, who has from 100 to 200 pupils a day, to know what each one is like. An easy way to acquire some information is to have every student fill out a personal data questionnaire on a file card.

Johnny's mental and scholastic history is revealed from his previous grades and the results of the mental, achievement, interest, and reading tests that he has taken. Linguistic test scores are, of course, most mean-

Miss Imogene Montgomery is a Teacher in the Mount Vernon Public Schools, Mount Vernon, Ohio.

ingful to the language teachers. The health record, if not normal, is important, too, especially if eye and ear tests reveal losses.

In a modern high school, such information about Johnny reveals that the pupil population in high schools is a cross section of the American population and that it is heterogeneous in cultural background, in vocational objective, and in intelligence. Such is also the case in language classes.¹

Since the teenage population in language classes is varied as to abilities, interests, needs, and learning attitudes, the program must be planned to meet and challenge these individual interests. Could it be that our professional organizations and language specialists have not been realistic enough in propounding their methodology? Could it be that they have neglected to consider what every high-school teacher must face—the independent, self-determined adolescent's nonreceptiveness to his school program?

Perhaps some statistics on drop-outs and failures in foreign language courses and some studies on the reason why Johnny doesn't like, drops, or fails his French or Spanish course might give a new approach or solution to lagging language enrollments as well as desirable information to teachers, guidance workers, administrators, and language specialists.

Everyone is, of course, aware that a part of the decreased enrollment is due to the keen competition of subjects for a place in Johnny's school day. With the better student, it is often just a case of his not being able to work into his day's program all the required subjects, the mathematics, science, and modern language that he wants. The National Association of Secondary-School Principals is currently studying this problem in committee. Perhaps our professional organizations should be making such a study, too.

But the stiffest competition today is with the activity subjects, such as photography, marching band, dramatics, art, typing, *etc.* These subjects require little homework and give an opportunity for self-expression.

Again the teenager is practical; he wants a subject with functional use. Just what will his language needs be? For college? For the armed services? For vocational needs, such as teaching, government, or export work? For travel, now or later in life? A good high-school program must begin to meet these needs.

It is, unfortunately, the general practice in the United States to offer but two years of one foreign language in high school;² however, language departments should strive, whenever time and money permit, for a six-year program, such as is presented in the fine French and Spanish Monographs of the Garden City High School French and Spanish departments under Miss Evelyn Eaton's able leadership.³

¹"Foreign Languages Instruction in Secondary Schools," 1956 Northeast Conference on the Teaching of Foreign Languages, Reports of the Working Committees, April 1956.

²"FL Offering and Enrollments in Public High Schools," FMLA, September 1955.

³Garden City High-School Modern Language Department, *French Instruction*, Monograph No. 1, *Spanish Instruction*, Monograph No. 2, Duplicating Dept., Teachers College, Columbia University, New York, 1944, 1946.

In the beginning, then, of this two-year French or Spanish course, there must be some orientation. Students must be aware that their language study is a progressive experience, as well as a progressive acquisition of a skill, and that a longer time than two years is needed to approach mastery. However, if the program is varied enough and enthusiastically presented, everyone in French and Spanish class will increase his ability to understand, to speak, to read, and to write French or Spanish, as well as increase his knowledge, understanding, and appreciation of French and Spanish speaking people and their civilization.⁴ The progress made will, of course, depend upon the natural ability, work habits, interest, *etc.* of each pupil, and the challenge which the program offers him.

What comprises a challenging program? It consists of oral work, speaking, understanding, pronunciation drills, dictation, reading, grammar study, vocabulary, idiom, verb study, writing-exercises, compositions and resumes, testing, cultural studies, and language-pupil activities.

How are all these phases of the language program to be organized and presented? Many of them are integrated with the oral work. It predominates, since there is the keenest interest in the spoken word. Although from the beginning most of the class is oral, the teacher must be alert to the students who do not have ready imitative and oral skills. They may become discouraged and form a dislike for the subject. It is then that some other phase of the program like reading can be emphasized for a time. Some formal study of pronunciation, here, will help them to acquire the same pronunciation that the more gifted have already absorbed through imitation and association.

Much of the success of the program at such times depends upon the available materials in the textbooks and readers used. Some of the modern Spanish books⁵ in their two-year series lend themselves to a multiple-approach program. There is plenty of interesting reading material to give the poor oralists a sense of achievement in understanding at least the written word, and acquiring some new vocabulary which they can perhaps use in simpler exercises and answers to questions. These texts, too, with their pictorial conversations and cultural readings, stimulates all pupils to try to talk about what they see and read. The French texts are less versatile. It is often necessary to use two in order to be able to use the reading skill as a learning aid.

Another learning aid is writing. So many foreign language teachers neglect this, or fear it even. Doesn't psychology teach that one remembers best if as many of our senses or faculties as possible are used in the learning process—the eye for seeing, the ear for listening, the mouth and voice for speaking, and the motor activity for writing? So in a good language program Johnny is given a daily assignment to be written.

⁴William R. Parker, *The National Interest and Foreign Languages*, U. S. Government Printing Office, Washington 25, D. C. April 1964.

⁵Jarrett and McManus, *El Camio Real*, Book I and Book II, Houghton Mifflin Company, Boston, 1963, 1964.

Staubach and Walsh, *First-Year Spanish; Second-Year Spanish*, Ginn and Company, Boston, 1964, 1965.

At first it may be copy work of the oral work done in class; then it can progress to the exercises in the book, compositions, and resumes. At all times he is encouraged to do this work at home so that as he writes, he can say aloud, listen to, and look at what he writes. As he writes and takes dictation in class, he is, of course, learning to spell the new French or Spanish words.

The grammar study evolves as a by-product of the oral work and of the reading and the writing that the pupils do. The gifted pupils can always find the new forms and develop the rules from context and help the other students to apply the rules in usage. Wherever possible new forms of verbs and pronouns are developed with the whole class at the black-board. Some times this is done by dictation, and some times through a reading lesson.

Differences in word order, in verb forms, and in idioms from our English usage are noted. Johnny now understands why foreigners speak "broken English," and why he often speaks "broken Spanish," or "French." His own language and its structure are beginning to be more meaningful.

A good testing program is another approach to language mastery. Tests must be multiple in type—in dictation, in aural comprehension, in reading comprehension, in grammar, and in vocabulary. The pupil is encouraged to analyze his errors and relearn, often for credit, what he did not know. Vocabulary tests for each lesson or chapter can be mimeographed and given to the student for home study and then assigned as a daily quiz. Likewise, large unit vocabulary tests will show the pupil what progress he is making in acquiring and retaining a vocabulary in French or Spanish.

Because there is so much oral work to be done in class, so much grammar work to be developed, tests to be taken, *etc.*, it is impossible to spend enough time on reading to acquire much speed or fluency. This objective is encouraged by an outside reading requirement of forty-five minutes a week, with a brief summary reported on a special blank. Classroom libraries and the high-school library should have books of different reading levels. The teacher helps the pupil to select a book that he can read easily for comprehension. He is encouraged to exchange his book if he does not find it interesting or if he finds it too difficult. The teacher can spot check the reading done in oral conferences once or twice a year.

Since the pupils understand the reason for their written work and also the outside reading requirement, many of them assume the responsibility and do much more than the stipulated amount. In the summer between the first and second year, many students do all of the required readings for the second year. Not only are the results gratifying in the amount of material read, but also new words and idioms show up in the oral work

in class, and explanations of grammar and verb forms are asked for long before they appear in the text.

In this language program, gifted students must not be neglected. It does not take long to identify them. Their abilities are clearly revealed on the first battery of tests. It is interesting to note that even some of the most gifted students have no ear quality and have to attack the oral work the long way. Special scholarship programs, college board tests, and college scholarships can often be motivating forces to embark the gifted on a course of study that may lead to a scholarship or to admission to college with advanced standing.

Such a program unfortunately requires much outside help from a teacher. It cannot be done in class time, for the broad language program is too time consuming. The teacher can, however, see that the superior students have access to the many and varied language aids,—records, idiom and word lists, vocabulary cards, review grammars, advanced readers, literature books, *etc.* A good language department, too, should have on file numerous samples of state scholarship tests. National French Tests, *etc.* with keys. The gifted student can test himself, can work alone, and bring his problems to the teacher before and after school. If there are native French or Spanish speaking people in the community, the students can do conversation work with them outside of school. Although it is the minority who take advantage of all this additional learning, their superior achievements make that phase of the program worth while.

And now there are the parts of the program that Johnny particularly likes—the French and Spanish clubs, the audio-visual aids, the scrap books, and the cultural studies. These are well liked, of course, because they are primarily student activities.

French and Spanish clubs are organized in each class. Officers are elected and each person in the class works on a committee. Meetings are held once a month. The program is student planned and conducted, of course, in French and Spanish. Community resources are used to supply native speakers and travelers with pictures of the country in question. Contest days are popular—each committee presenting its game, puzzle, *etc.* The Christmas parties are gala affairs with pinatas, fancy decorations, and refreshments. French and Spanish movies are also extremely well liked. Other projects are a radio program for a local radio station, and a dance to make money for the department. The club work and the conversation group work are splendid socializing forces in the class. They make for a fine *esprit de corps*.

The audio-visual aids are always stimulating. The teacher can motivate the lagging attention of the class in pronunciation work by using the record player or the tape recorder. Johnny likes to hear himself and will work very hard on any assignment that is to be recorded. Movies, film-

strips, and slides present best the various cultural studies and civilization projects.

There is so much to do in the two-year language program that it is difficult to use all these language aids. Students are urged to use them during the noon hour and before and after school.

To house all the French and Spanish realia that they acquire in two years, the pupils make a scrap book. In it they put all the mimeographed materials—reading lists, popular songs, Christmas carols, all their tests, pronoun charts, compositions, and Christmas and Thanksgiving menus. Beside the section that shows much of their written work and the progress made in two years time, there is the section for articles, pictures, travel brochures, fashions, and anything pertaining to French or Spanish-speaking countries that the pupil finds interesting and wishes to put into his book. The French and Spanish correspondents, with their photographs, postal cards, copies of their school schedules and letters, often give the American students the best understanding of what life is like abroad. They are proud to record this material in their scrap books and display it on the bulletin board.

Through the cultural studies interspersed through their texts and readers, through the visual aids and other special projects, and through the student's interest as he is learning the language, his appreciation and understanding of a foreign civilization is growing. His provincial horizon is widening.

A good high-school program in French and Spanish is, therefore, a multiple one as it emphasizes learning to speak, to understand, to read and to write the language, and to learn about the civilization. Although the program is predominately oral in approach, it uses reading and writing to strengthen it and to make it more adaptable to the abilities of the pupil population. It uses audio-visual aids, student clubs, pupil-activities, and cultural studies for variety, interest, and motivation. The program provides for the gifted student. The multiple approach, too, has permitted every student to have some satisfactory language experience. Therefore, drop-outs and failures are reduced to a minimum; and Johnny has begun his mastery of French or Spanish. Perhaps the utilization of this program as described might enable the American high school to recover from one of its growing pains.

Trends in Secondary School Foreign Language Teacher Supply and Demand

GILBERT C. KETTELKAMP

TWENTY years ago the number of teaching vacancies in secondary-school subjects was not large. The foreign language field was no exception. Of the four commonly taught languages, German, French, Latin, and Spanish—opportunities for placement were probably best in the field of Latin.

In the late thirties, Latin was still a popular subject in the secondary school. The size of the school was apparently not an important factor in the distribution. Even a school with a small enrollment almost always offered Latin if it offered a foreign language at all. For example, a study in 1937 revealed that in the State of Illinois over ninety per cent of the schools employing no more than ten teachers were offering Latin.¹ It is quite probable that an equal or even greater percentage of the larger schools also included Latin in their curriculum.

The two decades immediately preceding 1937 saw a number of significant changes in the foreign language offerings in secondary schools. World War I practically drove German out of the curriculum. In fact, only a few schools made any effort to keep the teaching of the subject alive during the postwar period. Because of this change some of the teachers of German had to shift into minor teaching fields if they wished to remain in the teaching profession. A number of this group turned to other foreign languages or to English. Others went into fields far removed from the languages.

French enrollments went up somewhat in the immediate post World War I period as German enrollments went down. The gain in the one field was obviously somewhat at the expense of the other. At the same time Spanish enrollments began to show a slight increase, but the language had not yet gained much of a foothold except in the southwestern states. Latin maintained a rather stable position during these years; as enrollments fell off in some communities, they went up in others. Outside of French, therefore, the dispossessed teachers of German found little opportunity to remain in the foreign language teaching field.

The years of the early thirties were not too different from those of the twenties. French continued to do reasonably well. German struggled to

¹Edward F. Potthoff, "Simplifying the Combination of Subjects Assigned to High-School Teachers" *University of Illinois Bulletin*, No. 87, 36:20, June 1939.

Gilbert C. Kettlekamp is Professor of Education in the College of Education of the University of Illinois, Urbana, Illinois.

maintain its meager foothold. Latin appeared to be in no particular danger. But during this time it was already evident that Spanish was on the move. Schools in parts of the country other than the Southwest were beginning to offer the language. This gradual increase was partly at the expense of French and partly of Latin. German probably felt the expansion least; it was being offered only in a limited number of schools, so could provide few resources upon which another language could draw. But even the moderate enrollment shifts from French and Latin to Spanish affected the work of some of the foreign language teachers. A number of the teachers of French and Latin who had Spanish minors found themselves teaching an increasing number of sections of the latter language. Some of these teachers even gave up working in French entirely and turned their full attention to Spanish. Others continued instructing in both fields. Some Latin teachers also made the shift but, as a whole, this number was not large.

The two decades immediately following the first world war, therefore, saw two distinct changes in foreign language enrollments. In one, German dropped from a relatively favorable position in the early part of the century to one where, two decades later it even had to struggle to survive. The other change saw Spanish gain a foothold from which it later would spring forward to challenge French and Latin.

But even before the close of the nineteen thirties a new factor was injecting itself into the positioning movement among the four languages. There was already evidence at that time that Latin was going to have a questionable future. This was the case if for no other reason than that not enough individuals were preparing themselves to take care of future classroom teaching needs in the subject.

Of the four languages in the late thirties, Latin held first position in numbers of students enrolled. At that time none of the three modern languages appeared as an immediate threat to this position. Even Spanish was only making moderate gains. From the standpoint of student enrollments, therefore, Latin appeared to be a stable subject field in the secondary-school curriculum. But from the standpoint of teacher supply, the outlook was less encouraging. At that time already a large proportion of foreign language student trainees were preparing themselves to work in fields other than Latin. This was the situation, even though opportunities for placement in modern foreign language teaching positions were not particularly favorable then.

Already in the nineteen thirties the problem of a Latin teacher shortage in secondary schools must have been apparent to school personnel. Even then, with high Latin enrollments, few high-school graduates chose to go on to prepare themselves to teach the subject. Questions such as the following could well have been asked to determine the reasons for this decline: (1) What purpose did high-school students have in enrolling in Latin? (2) Why did so few students find the subject stimulating enough to continue work in it? (3) Was there a lack of appropriate

counseling? (4) Did students regard the subject as terminal in high school? If so, why? Other pertinent questions could also have been raised, but the above points cover at least some of the basic aspects of the problem. Possibly the situation has not even improved since the thirties. It appears that school personnel will still find it worth while today to consider questions of the type suggested above.

It may appear somewhat presumptuous for the writer to draw conclusions on foreign language teacher supply and demand from data connected with only one teacher training institution such as the University of Illinois. Yet conditions in teacher training at this school from 1937-1957 were probably not too different from those in most other teacher training institutions in the Middle West. At least the data reveal some trends in supply and demand in the field of foreign languages that should be helpful to school people in curriculum planning.

The first two tables shown below cover the period from 1937-1957 at the University of Illinois. Table III also includes data over a selected five-year period of time from the University as well as from a number of the other state-supported institutions training foreign language teachers in Illinois.

Table I gives the number and classification of calls for foreign language teachers which came to the Office of Teacher Placement at the University of Illinois between 1937 and 1957. Figures are not available for all of the later years of the period, but the data appear to be complete enough to indicate the changes in type of calls that took place during those twenty years.

Already in 1937 it was obvious that the demand for teachers in the four major foreign language fields was rather out of line with the numbers of individuals preparing to teach these languages. Outside of Spanish, in which there were no teacher trainees, Latin had the fewest number in preparation. Yet the 117 calls for Latin teachers was over twice 56, the combined total of the other three languages. The proportion of calls between the languages remained about the same for the next two years, although the total number of student teachers more than doubled. The French number made an especially large increase in 1938. Spanish came up fast enough to pass German and Latin, both of which had only slight increases. During these same two years, the number of calls for teachers in each of the four languages did not make significant changes. The increases in French, German, and Latin for 1938 were balanced out by drops in 1939. Spanish calls declined slightly during the same period of time even though the total number in 1937 was the same as that of German.

The school year of 1940-41 marked the beginning of a change in the language-call pattern. The total number of calls was not too different; in 1939 there were 159, in 1940 there were 147. But the changes between the languages were striking. French had a respectable increase while German remained the same. Spanish made a spectacular increase which

TABLE I.—CALLS FOR SECONDARY-SCHOOL FOREIGN LANGUAGE
TEACHERS AT THE UNIVERSITY OF ILLINOIS, 1937-1957.
CLASSIFIED ACCORDING TO SUBJECT FIELD.

School Year	French			German			Latin			Spanish		
	Alone	With Other Subjects	Total	Alone	With Other Subjects	Total	Alone	With Other Subjects	Total	Alone	With Other Subjects	Total
1937-38	2	30	32	2	11	13	2	115	117	0	13	13
1938-39	5	34	39	4	16	20	4	125	129	0	10	10
1939-40	1	30	31	2	10	12	5	102	107	2	7	9
1940-41	2	41	43	1	11	12	2	42	44	4	44	48
1941-42	3	40	43	1	6	7	7	145	152	15	48	63
1942-43	1	43	44	1	8	9	4	156	160	13	67	80
1943-44	4	21	25	0	6	6	5	105	110	7	50	57
1944-45	9	36	45	3	12	15	9	108	117	18	66	84
1945-46	22	66	88	9	26	35	7	118	125	25	104	129
1946-47	17	77	94	22	39	61	5	97	102	31	132	163
1947-48	6	47	53	8	20	28	9	70	79	29	66	95
1948-49	9	44	53	7	21	28	4	59	63	16	72	88
1949-50*	—	—	—	—	—	—	—	—	—	—	—	—
1950-51	—	—	—	—	—	—	—	—	—	—	—	—
1951-52	—	—	—	—	—	—	—	—	—	—	—	—
1952-53	—	—	—	—	—	—	—	—	—	—	—	—
1953-54	5	11	16	1	4	5	11	24	35	13	32	45
1954-55	—	—	—	—	—	—	—	—	—	—	—	—
1955-56	—	—	—	—	—	—	—	—	—	—	—	—
1956-57	15	23	38	5	8	13	16	38	54	21	28	49
Total	101	543	644	66	198	264	90	1234	1324	194	739	933

* Calls were not classified for the years left blank.

it never again lost. But it is difficult to explain why Latin dropped from 107 to 44 and then jumped to a booming 152 the following year. The increase in French and Spanish could not have been entirely at the expense of Latin, for in 1941 when Latin came back, the only language that had a loss was German. Actually the number of individuals involved in that loss was so few that it could have provided only a few new enrollees for Latin.

The war years of 1941 through 1944 followed a somewhat regular pattern in number of calls. Each language had an increase through 1942. In 1943 there was about a thirty per cent drop in each field. In 1944 each field recovered somewhat, yet Latin gained the least. In 1945 the number of calls for teachers of French and of German doubled from those of the previous year. Spanish made a thirty per cent gain to take top position. Again the gain in Latin was small, although the number was close to that of Spanish. The French and German combined total about equaled that of each of the other two languages.

In 1946 the three modern languages each reached a new peak in number of calls. German and Spanish made heavy gains while French also

TABLE II.—FOREIGN LANGUAGE STUDENT TEACHER ENROLLMENTS IN THE UNIVERSITY OF ILLINOIS, 1937-1957.

<i>School Year</i>	<i>French</i>	<i>German</i>	<i>Latin</i>	<i>Spanish</i>	<i>Total</i>
1937-38	8	5	3	0	16
1938-39	18	6	4	9	37
1939-40	11	4	6	8	29
1940-41	6	4	6	4	20
1941-42	11	4	9	4	28
1942-43	7	2	2	5	16
1943-44	5	3	0	3	11
1944-45	1	0	0	9	10
1945-46	2	0	2	6	10
1946-47	2	2	1	12	17
1947-48	8	5	0	12	25
1948-49	5	2	2	20	29
1949-50	7	6	2	15	30
1950-51	9	4	1	19	33
1951-52	8	2	0	15	25
1952-53	6	1	2	7	16
1953-54	6	0	2	10	18
1954-55	5	4	2	3	14
1955-56	6	2	1	12	21
1956-57	3	4	2	9	18
Total	134	60	47	182	423
1957-58 Pre-registration: French 6, German 4, Latin 1, Spanish 10.					

went up some. At the same time Latin lost. After the war closed, the demand in all subject fields declined sharply. The proportion of loss was generally about the same in each field in 1947. There was little change the following year, although Latin and Spanish had only slight losses.

From 1949 through 1952 the Teacher Placement Office at the University of Illinois did not classify the foreign language calls which it received. However, a check was made again in 1953. By then the calls for foreign language teachers had declined sharply. French and German were extremely low with drops from 1948 of about sixty and eighty per cent respectively. Latin and Spanish each declined slightly less than fifty per cent.

A check on calls was made again in 1956. By then French and German had made sharp recoveries but were still considerably below their 1948 levels. Actually, their numbers totaled about the same as those of 1937. Yet there was one distinct difference. The number of calls for full-time teachers in both fields has increased from four to thirty. This move indicated definite changes in foreign language enrollments and foreign language curriculums. There were more sections of foreign languages being taught, and these sections probably also included more classes at upper levels of instruction. In Latin and Spanish there were also in-

creases in the number of calls from 1953 to 1956. Of the two, Latin had the greater number. Actually, the totals for the two were not very far apart. However, the same changes in regard to full-time calls occurred in these two languages as took place in French and German during the same three years. All went up sharply; in fact, all were above fifty per cent except Latin and the percent there was only slightly less than that figure.

The change from part-time teaching in a foreign language to full-time teaching is one of the most striking changes that took place during the two decades immediately preceding 1957. In 1937 there were 173 calls for foreign language teachers in all four fields. Of this number there were only six calls for full-time personnel. No language had more than two. In 1956 there were 154 calls. Of this number 57 were for full-time teachers in a designated foreign language. This was a jump from somewhat over three per cent to about 37 per cent. In other words, a considerable number of foreign language teachers were for the first time beginning to give full-time attention to teaching a foreign language. This change definitely affected the type of instruction offered. Teachers devoted more time to working in one subject. Hence, the motivation was present for developing increased proficiency in teaching in that field. This was particularly the case in developing improved pupil oral-aural ability in modern languages. In order to achieve such an objective, the teachers themselves had to develop a greater fluency in using the language which they were teaching. Interest in the in-service improvement of teachers was evidenced by an increase in the number of articles that appeared on this subject in foreign language journals during these years. There was also an increase in attendance in summer schools offering foreign language conversation courses.

The total number of calls received by the University of Illinois Teacher Placement Office for the fourteen years of the two decades covered, reveal some interesting facts. The total for Latin teachers was 1324. The majority of these came during the first of the two decades. Spanish was next with 933 calls. Then came French with 646. German was last with 262.

During these two decades the University trained 182 Spanish teachers, 134 French, 60 German and only 47 Latin. The figures show that the greatest number of calls came for Latin teachers, the field in which the smallest number of individuals had been trained. The ratio between the number of calls and trainees in the three modern language fields was about the same. It was approximately one trainee to every five calls. In Latin, however, it was one trainee to every twenty-five calls.

In 1947 the writer checked with state-supported teacher training institutions in Illinois in regard to the number of Latin teachers that they had trained between 1942 and 1947. Table III shows the enrollments in the various schools.²

²Gilbert C. Kettelkamp, "What of Latin?" *Educational Administration and Supervision*, Vol. 34, p. 496.

TABLE III.—NUMBER OF STUDENTS GRADUATING AS LATIN TEACHING MAJORS IN STATE SUPPORTED TEACHER TRAINING INSTITUTIONS IN ILLINOIS DURING 1943-1947.*

School Year	Southern Illinois University	Eastern Illinois State Teachers College	Western Illinois State Teachers College	Illinois State Normal University	University of Illinois	Total
1943-1944	2	1	2	2	0	7
1944-1945	1	1	1	3	0	6
1945-1946	2	4	0	1	2	9
1946-1947	1	1	0	2	1	5
1947-1948	2	0	0	1	0	3
Five Year Totals	8	7	3	9	3	30

*Northern Illinois State Teachers College did not train any Latin teachers during the above five-year period.

During these five years the calls for Latin teachers remained higher than for any of the other three languages. At the University of Illinois during this five-year period there were 18 French trainees, 10 German, and 42 Spanish. Latin had only 3.

It would be unwise to draw broad conclusions from the limited data included in the three tables shown above. Yet certain trends are readily apparent. Foremost among these is the fact that changes in French, German, Latin, and Spanish enrollments were reflected in the number of calls received for teachers in the various foreign language fields during the decades in question. Latin was popular during much of the period, although there was a slight decline during the later years. French, likewise, did not change a great deal. German made only a slow recovery from the blow of World War I. In contrast, Spanish came from last position in 1937 to challenge Latin from the early nineteen forties on. The two were still about equal in 1957.

During the twenty-year period from 1937 to 1957 the University of Illinois trained nearly four times as many Spanish teachers as they did Latin teachers. This fact raises a pertinent question: What is the source of supply of Latin teachers today? For the last twenty years, few young teachers of Latin have been fed into the professional ranks. Therefore, the teaching is evidently being done today by individuals trained before 1937. This means that the real crisis for Latin is coming within the next twenty years, possibly even within the next ten unless something is done quickly. There is a fine core of teachers of Latin working in our schools today. But this group must not only work hard but work fast to recruit from their classes young people who will replace them within the next decade. If this is not done, Latin will suffer a blow worse than that which struck German in 1917. The blow will be more

widespread because Latin is more widely taught in our secondary schools today than was German forty years ago.

The rise of Spanish has almost been sensational. Its future is bright for several reasons. The supply of teachers is greater than that in any of the other three languages. Also, its more recent growth has brought many young people into the field. Hence, staff retirement will not be a critical factor in Spanish for some time to come. Moreover the supply is being replenished regularly each year as enrollments in student teaching indicate. But even with this expansion, the supply is far short of the demand.

The number of students preparing to teach French today is considerably less than it was twenty years ago. In contrast, the German number is nearly equal to that of 1937. In both fields the supply is inadequate to meet present-day demands. Yet the shortage is not as acute as it is in Latin. At present there is a limited movement to bring German back into secondary schools. The extent to which this will be possible will be determined by the number of available teachers. The supply is certainly not very great.

The increasing demand for foreign language teachers makes it imperative that high-school teachers and administrators encourage capable students to enter the foreign language teaching field. If they do not do this, the demand for such teachers cannot be met. The school administrator who cannot find a qualified person to teach his foreign language classes has no alternative other than to drop these courses from his curriculum. The next five years can well hold the key to the future of foreign language teaching in American secondary schools. For Latin, that period may well determine its death or survival.

THE SCHOOL BELL

The School Bell, a 16-page digest magazine of outstanding articles on education from the national magazines, radio, television, and the press, is published monthly except July and August, by the National Public Relations Association and the Division of the Press and Radio Relations, National Education Association.

Subscription rates are as follows: Single annual subscription, \$2; 10 or more subscriptions mailed to the same address, \$1.60 each. You may also order single copies of any issue of *The School Bell* at the following prices: Single copy, 20¢; 10 or more copies mailed to the same address, 16¢ each. Order from National School Public Relations Association, 1201 Sixteenth Street, N. W. Washington 6, D. C. Also available at \$1.25 per copy (10 or more copies, \$1 each) is a 64-page publication *School 1957*. This is composed of 25 selected features from the first five issues of the *School Bell*. These authors are top writers from national magazines, radio, television, the press, and government reports on today's schools.

How an English Language Arts Course of Study Evolved

JOSEPH MERSAND

ORIGIN OF THE NEED FOR CURRICULUM CHANGE

NEW YORK CITY has been witnessing many changes in its over-all curriculum in recent years. With the establishment of a new associate superintendent in the area of curriculum development and the consequent formation of a bureau of curriculum development, it was natural to anticipate a considerable revival in interest in modernizing and changing the curriculum to meet the needs of our own times. Under the leadership of Associate Superintendent Ethel F. Huggard and Dr. William H. Bristow, Director of the Bureau of Curriculum Research, there has appeared in the past four years a considerable number of new courses of study, bulletins, research study, and other curricular publications. The areas run the gamut from *How To Use the Tape Recorder* to *Women's Apparel Trades*, from *Earth Science* to *Hair Dressing and Cosmetology*. Constant research, cooperative planning, a production program, and editorial supervision make the Curriculum Center at 130 West 55th Street a veritable bee-hive of activity. A visitor at the Center will witness the deliberations of three or four teacher-supervisor committees at work on some curricular project and meetings of other groups such as the all-day neighborhood schools, the early childhood education teachers, etc. In short, as never before, teachers, supervisors, and administrators are co-operating in changing our curriculum.

The preparation of a course of study in *Regents Biology* or *Aviation Mechanics* is a relatively simple matter compared with the problems involved in preparing a course of study in language arts for such a heterogeneous city as New York.

Since there are about ninety academic and vocational high schools—each with its own school population, objectives, and specific problems—, it is no easy matter to devise a course of study that would be meaningful, challenging, and fair to the thousands of students in these schools.

The average American high school is usually the only school in the town, and caters to a relatively homogeneous student body. The *mores* and the social goals of the community are fairly uniform, and they determine the objectives, the content, and the methodology used in this

Joseph Mersand, formerly Curriculum Coordinator for the Academic High Schools of New York City, is Chairman of the English Department of Jamaica High Schools, New York City.

school. New York City is quite a different matter. The speech, the socioeconomic status, and the goals of the parents in Seward Park High School in New York City are quite different from those of the parents in Forest Hills High School. The vocational plans of the students in these different schools are quite far apart. The same language arts program for such a diversity of schools would be fantastic.

When the New York City Board of Education adopted a *Syllabus for High School English* in 1922, it could incorporate the objectives, the content, and the measurement in a booklet of sixty-four pages. This *Syllabus* was an expansion of a *New York State Syllabus*, originally adopted in 1916, and only thirty pages in length. In 1922 it was a comparatively easy thing to prepare a syllabus. Incidentally, we at the Curriculum Center draw a distinction between a *course of study* and a *syllabus*. The former is more in the form of an outline of subject matter, whereas the latter is more detailed and contains more material about methodology, audio-visual aids, etc. In 1922, most of the students in the high schools of New York City were planning to go to college. There were few vocational high schools, and Brooklyn Technical High School and Bronx High School of Science were still unheard of. A curriculum expert in Albany could prepare a syllabus in a comparatively short time, have it distributed to all parts of the state, and suggest modifications to meet the local needs. The *Syllabus* prepared in New York City in 1922 bears no name of author. We do not know whether a teacher, a department head, or a curriculum expert prepared the document.

In 1935, the State Education Department issued a new syllabus; this time, 300 pages in length. Provision was made for all kinds of enrichment, for enrichment of instruction, for evaluation, for differentiation. It was a most impressive and welcome document, and served many English teachers in New York City.

In 1946, as part of the general survey of instruction in the high schools of New York City, it was decided to survey the instruction in English and Speech. Miss Margaret A. Nolan, Chairman of English in Forest Hills High School, was chosen to serve as secretary of a committee to conduct the survey and to make recommendations. When the survey finally appeared in 1952, it made a number of recommendations, including an over-all revision of the course of study in English and Speech.

A two-day workshop was conducted in the Curriculum Center, to which representatives from various schools and colleges were invited. A representative group indeed was assembled. During the two days in December 1951, there was much discussion of the problems in English teaching generally, and some ways of meeting these problems. It was also suggested that it was time to write a new course of study in English. In May 1952 Dr. A. Barnett Langdale, Chairman of the English Department of Erasmus Hall High School, was excused from his assignment to come to the Curriculum Center to prepare preliminary materials. A meeting was held of twenty-seven members who had been officially approved by

the Curriculum Council for preparing the course of study. At this meeting on May 2, 1952, the *Notes on English Project* were distributed. These *Notes* consisted of the following: Key to Source References, Basic Aims, General Principles, Basic Curricular Problems in the English Field. The date was set for the first meeting in the September 1952 term, and an assignment was given out: to be prepared to recommend items which should be included in our policy statement.

PROCEDURES OF THE STEERING COMMITTEE

It was agreed that the Steering Committee would meet every two weeks in the fall term to receive materials, to discuss them, and to make decisions about them. As was to be expected, there was a great deal of enthusiasm at the beginning of the project. The members felt that they were making history. The wealth of materials issued was truly amazing. The different portion of the "basic materials" which were issued by Dr. Langdale in the course of this semester were:

(a) Basic Aims (10/1/52) — (1) Course of Study: Guiding Principles (Issued 10/29/52); (2) Literature; (3) Written Expression; (4) Speech; (5) Listening; (6) Language Study: Grammar, Semantics, Mechanics (10/1/52); (7) Newspaper, Magazine, Motion Picture, Radio, Television (9/10/52); and (8) Miscellany (Audio-Visual, Bi-Linguals, Co-Curricular, English in the Core Program, Library, Vocational Training Aspects of English, Slow Learner).

To obtain an idea of how intensive the discussion was on certain phases of the material, I should like to refer to the various forms of the "Basic Aims." The first draft was issued on October 1, 1952, and was discussed by the Steering Committee. The suggestions were incorporated in a second statement, "Basic Aims—First Revision." Thirdly, there was issued a supplementary statement; and, finally, a subcommittee prepared an extended list, arranged in consonance with the report of the Educational Policies Commission of the NEA on the *Purposes of Education in American Democracy*. Not all parts of these basic materials were subjected to the same kind of intensive analysis. To have done so would have prolonged the process of producing to an unconscionable length of time.

PROCEDURE WHEREBY DEPARTMENT HEADS IN ENGLISH AND SPEECH WERE INVOLVED

It was always the intention of the steering committee and the project coordinator to involve as many supervisors and classroom teachers in this project as was feasible. Hence, it was decided to distribute some of these basic materials to all chairmen of English and speech. October 21, 1952, was the date on which such materials were distributed to the chairmen. There was a great deal of discussion of these materials at department meetings, which was exactly what he had hoped for. Teachers were

alerted to the curricular activity that was going on in the language arts, and were expressing an interest in our project.

Further participation in the work was obtained when each chairman of a department was invited by the assistant superintendent in charge of our project at that time, Dr. David H. Moskowitz, to submit examples of curricular innovations in their respective projects. A *Directory of Curricular Projects in English and Speech* was compiled from the materials sent in. This *Directory* was distributed in September 1953 to all chairmen of English and speech departments in the hope that there would be interchange of information and that in this way curricular activity could be stimulated city-wide.

In the spring of 1953 we brought this project to the attention of members of both the N. Y. C. Association of Teachers of English and the equivalent associations of speech teachers and librarians. We held another meeting with the heads of English and speech departments. At both meetings, members of the steering committee presented aspects of the program and asked for cooperation from the members. Later, these addresses were printed in the *English Quarterly*, the magazine of the English teachers in New York City. Thus, we kept our colleagues informed of our progress. It certainly can be said that the lines of communication have always been kept open.

WRITING THE NEW COURSE OF STUDY

Deliberations, mass meetings, requests for cooperation all do not write a new course of study. This must be done by individuals. In this case, the individuals were six co-chairmen: two for speaking and listening; two for writing; and two for reading. As each pair of writers completed its assignment, work was subjected to an evaluation by the entire steering Committee. In this way, sections were written on speaking and listening, written expression, reading and literature, and the library. The steering committee has felt that the work of the librarians was important enough to be entitled to an entire chapter. The six co-chairmen worked in pairs; and, on a number of occasions, they met as a group of six. In the minutes of their meeting as a group of six, this statement, a most important decision for this entire project, merits quotation:

The course of study can set down a scope for each major area, describe growth in the several aspects of the scope, and tell teachers how to evaluate the growth when it occurs. The departmental chairman by means of his syllabus materials can provide a framework of developing centers of interest and an ascending order of reading experiences to foster growth in the light of the knowledge of the range and the normal interests and abilities of the pupils in his school. He can and should provide a year-by-year allocation of some of the specific items from the scope to secure coverage, growth, and economy of teacher and pupil effort.

The class teacher (the pivotal person in the learning situation) can set down the plan for the term's work of a class after:

1. Securing pupil profiles through initial inventories of abilities.

2. Canvassing pupil profiles through initial inventories of abilities.
3. Singling out for emphasis the content called for in that term by the departmental syllabus.
4. Making provision for building upon content learned in the preceding term.
5. Preparing to give incidental and integrative recognition to all other items in the total language-arts scope.

In this manner, the steering committee expressed a basic philosophy regarding the relationship that should exist between the city-wide course of study and the language arts program of the individual school. We could not possibly prepare a course of study to tell each teacher of ninth-year English what to do on Monday of each week. The question might then well be asked, In what way was this a change over the past? Did we not all make our own courses of study to fit the needs of our individual schools? Yes, we did! But what resulted was a series of shots in the dark. It was true that the state syllabus was always before us, but this was already quite out of date (1934). Radio was hardly mentioned and TV had not been discovered.

What the steering committee hoped to do was to provide an over-all basic philosophy for each of the major areas of the language arts and a scope and sequence, and to give illustrative units that would guide the individual teacher to make his own units for his own class.

STEPS BY WHICH THE PROJECT WAS PRESENTED AND APPROVED

The practice in New York City is to secure the approval of a curricular project from the Curriculum Council and the Board of Superintendents before the project is begun. The initiation of our project was secured in the spring of 1952. A progress report was presented to the Curriculum Council on April 1953. We presented our scope and sequence before the Board of Superintendents. No objection having been raised by either body (although this does not mean complete approval), we proceeded with our plan. There were some arguments which the steering committee had. For example, there was the time-honored argument about how to teach the skills. Should they be taught sequentially or functionally? Were the two methods mutually exclusive? A sub-committee was appointed to consider the research on the matter. Although no conclusions were reached, this report contained some basic extracts which helped our steering committee to come to some decisions. Another problem with which the steering committee had to wrestle was that of pre-established sequence. Since no course of study would be accepted by the Board of Superintendents until it had scope and sequence, we felt obligated to discover some workable sequence. Of scope in the language arts, there is no end. In fact, there is too much scope!

ADVISORY OPINIONS FROM EXPERTS

Although the members of the steering committee were chosen because of their competence in their field, they felt early in their deliberations

that they should invite the opinion of experts on certain phases of their work. On March 11, Dr. Joseph Gainsburg, Principal of J. H. S. 73, Queens, and noted authority on reading was invited to discuss the chapter on reading and literature. Another opinion on reading was invited of Dr. May Lazar, Assistant Director of the Bureau of Educational Research. Later on we had the benefit of criticisms from Francis Griffith, Principal of Richmond Hill High School; A. H. Lass, Principal of New Utrecht High School; and Dr. George W. Norvell, State Supervisor of English. When we had gathered the various sections together, we compiled what we called the "medial round-up" and sent a copy to each chairman of English, asking him to comment on some portion of the report. We tried to pin point the criticisms we wanted and in this way to avoid any vague criticisms. The medial "round up" shows how much of a curricular project which had begun about a year before had been completed. The reports from the chairmen were most encouraging. Over forty answers came in with very specific criticisms. These criticisms were incorporated into the second revision.

Since Assistant Superintendent David H. Moskowitz was in charge of the entire project, we invited him to comment on our medial round up, which he did most effectively. Many little weaknesses which had not been noticed were pointed out, and the viewpoints of the superintendents who would eventually pass upon our work were explained. At the other extreme, we received some reports from classroom teachers who gave us an insight into their reactions to our medial round up.

Two advisory committees were organized: one consisting of department heads; another, of classroom teachers. The former met once; the latter, twice. Their opinions were in the main favorable to our plan and they were eager for more specific assignments.

GETTING DOWN INTO THE CLASSROOM

Many people who have read the course of study so far have remarked that the theory is fine, but what will the classroom teacher do with such good theory. We realize that, unless we offer some practical examples of illustrating our theory, the classroom teacher will be disappointed. Hence, we decided to prepare four large resource units—one for each high-school year—in which we spell out our theories. To date, only one such unit has been mimeographed, but not yet distributed to the chairmen or the teachers, because we have decided to re-write it. Since we hope to obtain a sequence not by a series of allocated books or by a series of predetermined skills or composition topics, but by a study of large themes, we have decided to give each school and each department a great deal of freedom to develop its own units, once we have shown the pattern. When these units have been written, they will be distributed to the various departments of English and speech for their evaluation and possible implementation. We have invited successful classroom teachers to the Curriculum Center to work on these units. When they have been completed and

approved by the Curriculum Council, we shall they try them out in various types of schools, both academic and vocational.

GETTING THE HIGH SCHOOL PRINCIPALS INTERESTED

One of the bodies which passes on all new curricular projects is the High School Curriculum Planning Committee. This consists of several high-school principals, a junior high-school principal, a teacher representative, and high-school chairmen. They have already seen our medial round up and have reacted strongly to some of our statements. We have made corrections in accordance with these statements, and have tried to remove the weaknesses which they have pointed out. Eventually, we shall have to come before the Curriculum Council, the Board of Superintendents, and the High School Curriculum Planning Committee and obtain the approval of all three bodies. When we plan to implement our course of study, we shall have to secure the approval of the principals in the schools in which they serve. That is one of the reasons why we have invited a number of high-school principals to come before the Steering Committee to give us their reactions. These principals have been heads of departments of English before they became principals.

PREPARING THE COURSE OF STUDY FOR FINAL REVISION

Since the secondary summary of our course of study is the work of several hands, it is natural that there are differences in style, vocabulary, and even possible inconsistencies. Hence, it is planned to turn the manuscript over to one editorial adviser, who will make the final version. This version will in turn be submitted for official approval. If such approval is granted, the manuscript will be processed for printing. At this stage, the production manager of the bureau of curriculum research is brought in for consultation. He suggests format, size of type, photographs, charts, etc. The manuscript is sent to the printer; galley and page proofs are corrected; and, finally, the new curriculum bulletin is ready for distribution. There is a regular method of distribution for such publications. Each school which will need it will obtain one copy. There will probably be enough for each high-school teacher of English, as well as English teachers in the junior high schools. Copies will be sent for review to other curriculum centers in other cities.

The Division of Curriculum does not conclude its project with the printing and the distribution of a new bulletin. Implementation takes place over a period of years. Strengths and weaknesses of the new course of study are observed. Changes are made in subsequent revisions of the bulletin. Interpretations are made whenever necessary to supervisors, teachers, and the lay public. Although it has been said jocularly that "of the making of curriculum bulletins there is no end," there is a degree of truth in the statement. As long as the needs of our students are not being met, the curriculum must be modified. Such modification is a dynamic process and never-ending.

BIBLIOGRAPHY

- Bulletins, Circulars, and Projects in Language Arts from the Bureau of Curriculum Research*
- Curriculum Research Project in Language Arts* by Margaret B. Parke
- Scope and Sequence of the Curriculum in Language Arts for Children 11-15 Years of Age in Terms of Developmental Levels* by Margaret B. Parke
- Tentative Plan for Curriculum Development in Literature for the Elementary Schools in New York City*
- Summary of Progress in Curriculum Development in Language in Grades K-9*
- Growth in Language Arts: a Chart* by Eugene A. Nifenecker
- Language Arts in the Curriculum for Grades 7, 8, 9*
- Books on Curriculum Revision*
- Alberty, Harold. *Reorganizing the High-School Curriculum*. New York: The Macmillan Company. 1947.
- Douglass, Harl. *The High School Curriculum*. New York: The Ronald Press. 1947.
- Gwynn, John M. *Curriculum Principles and Social Trends*. New York: The Macmillan Company. 1943.
- Jersild, A. T., and associates. *Child Development and the Curriculum*. New York: Bureau of Publications, Teachers College, Columbia University. 1946.
- Leonard, J. Paul. *Developing the Secondary School Curriculum*. New York: Rinehart and Company. 1946.
- Miehl, Alice. *Changing the Curriculum: A Social Process*. New York: D. Appleton-Century. 1946.
- National Society for the Study of Education. *Forty-Fourth Yearbook, Part I, Curriculum Reconstruction*. Chicago: University of Chicago Press. 1945.
- Saylor, J. Galen. *Factors Associated with Participation in Cooperative Programs of Curriculum Development*.
- Spears, Harold. *The Emerging High School Curriculum and Its Direction*, New York, American Book Company, 1948.
- Stratemeyer, F. B.; L. M. Forkner, and M. C. McKim. *Developing a Curriculum for Modern Living*. New York: Bureau of Publications, Teachers College, Columbia University. 1947.

CREDIT FOR TWO BULLETIN ARTICLES

The November 1956 and the February 1957 issues of THE BULLETIN each contained an article by Vynce A. Hines and Hulda Grobman—"What Makes a Good Principal" (pp. 5-16) and "What Parents Think of Their Schools and What They Know About Them" (pp. 15-25) respectively. Through an oversight, no citation of the research on which these articles were based was given. Belatedly, we wish to acknowledge the students who prepared the doctoral dissertations on this leadership project upon which the two articles were based. These are: Morton Alpren, Jean Battle, Patricia Carter, George Goodwin, Lee G. Henderson, Walter B. Mathews, Honor E. Maynard, Woodrow Bullock Sugg, Yewell Thompson, E. B. Van Aken, Ralph H. Walker, Paul Williams, and J. Bruce Wilson.

The Nature and Worth of a Program of Remedial Reading

ANGELL MATHEWSON
and HARRY R. MICHELSON

OF THE three methods of instruction in reading currently in use at the Trenton Central High School—free reading in the library, developmental reading for seniors with reading deficiencies, and remedial reading—the last, although perhaps the least original, is by far the most effective. Inaugurated in the school in 1935 as a part of the English program, instruction in remedial reading has produced good results for a considerable period of years. Some facts and figures in support of this assertion are offered herewith.

The policy (a common but perhaps mistaken one) of promoting pupils according to age rather than achievement has made it necessary to continue the teaching of fundamentals, including reading, to many of the pupils in high school. Such a state of affairs prevails to a marked degree in Trenton, an industrial community with only one public high school offering a comprehensive program to an unselected student body. Since many of the pupils cannot read well when they enter high school, it is necessary to have a program of instruction in reading for them. The pupils who entered the tenth grade in Trenton High School in September 1952 had a mean reading ability of 7.6, or six months higher than the norm for the beginning of seventh grade. Even after allowing for the fact that they averaged almost a year younger than the group on which the measuring instrument, the *Gates Reading Survey*, was standardized, one must consider that they were retarded more than a year on the average.

There is considerable evidence that this state of affairs with regard to reading deficiency in Trenton is fairly typical of conditions in the country as a whole. Betts, as reported by Wittels¹ in an article in *The Saturday Evening Post*, estimates that a retardation of three grades "below what educators try to teach pupils" is average. If retardation of from one to three years is to be considered normal, how much retardation is to be expected of the pupils who stand at the bottom of the scale of reading ability among those in the entering tenth-grade class? The bottom twenty per cent of each incoming class apparently includes the ones who are in greatest need of remedial instruction.

¹David G. Wittels, "Are We Failing Our Children," *Saturday Evening Post*, March 13, 1954, p. 165.

TESTING THE GRAVELY RETARDED READERS

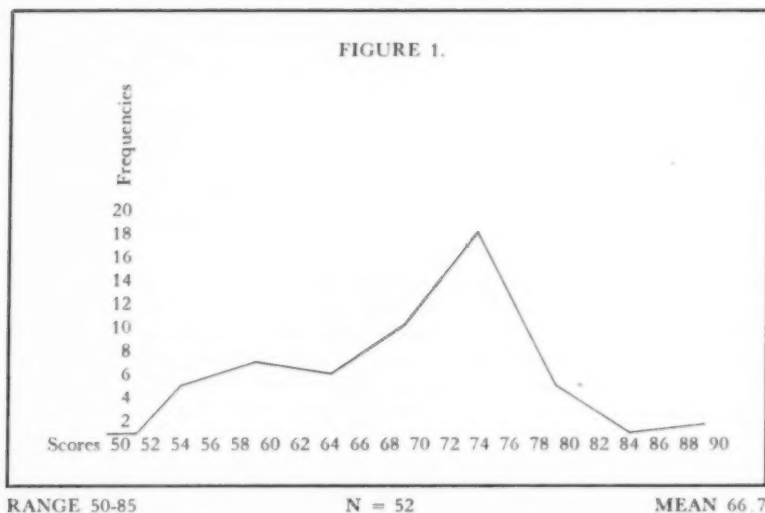
The group which was selected for the purpose of illustrating the nature of the remedial program in Trenton High School consisted of 67 pupils who were divided into three sections and assigned to a single instructor² in September 1953. Figure 1 shows the distribution of the IQ's in the group. Because previous experience had shown that the *Gates Reading Survey* was too difficult an instrument to supply reliable measures of the reading ability of gravely retarded pupils, Form R of the *Metropolitan Advanced Reading Test* for grades 7, 8, and 9 was selected to measure their reading ability in September 1953. After a little more than four months of instruction, Form S was used to test them again in January 1954.

Humphreyville³ has labelled pupils with IQ's from 89 down to 80 as "dull-normal"; 79-70, "borderline"; and 69 or lower, "feeble-minded." The pupils assigned to remedial reading in Trenton High School in September, 1953, had, with one exception, I.Q.'s below 80.

Only 52 of the 67 pupils in the classes were present in September and 47 in January when the parallel Forms R and S of the Metropolitan Test were given. Table I presents these data. The inferences presented in this paper are based upon the performance of the pupils who took both forms of the test.

²Harry R. Michelson.

³Frances T. Humphreyville, "A Teacher's Handbook for Teaching Retarded Readers in High School," unpublished doctoral thesis, Teachers College, Columbia University, 1952, p. 8.



I. Q.'S (TERMAN-McNEMAR TEST) OF PUPILS IN THE REMEDIAL READING CLASSES IN TRENTON CENTRAL HIGH SCHOOL, SEPTEMBER, 1953.

TABLE I. DISTRIBUTION OF 52 TENTH-GRADE PUPILS IN REMEDIAL READING CLASSES IN TRENTON CENTRAL HIGH SCHOOL IN SEPTEMBER 1953 AND JANUARY 1954, ACCORDING TO CHRONOLOGICAL AGE AND READING GRADE SCORES

Chronological Age-Years	Frequency	Reading Grade	Frequency of Reading Grade Scores in September-January	
18.5-18.9	2	13.5-13.9		
18.0-18.4	1	13.0-13.4		
17.5-17.9	3	12.5-12.9		
17.0-17.4	1	12.0-12.4		
16.5-16.9	12	11.5-11.9		
16.0-16.4	16	11.0-11.4		
15.5-15.9	10	10.5-10.9		
15.0-15.4	1	10.0-10.4		
14.5-14.9		9.5-9.9		2
14.0-14.4		9.0-9.4		4
13.5-13.9		8.5-8.9	2	1
13.0-13.4		8.0-8.4	3	1
12.5-12.9		7.5-7.9	2	1
12.0-12.4		7.0-7.4	2	10
11.5-11.9		6.5-6.9	3	6
11.0-11.4		6.0-6.4	11	10
10.5-10.9		5.5-5.9	13	5
10.0-10.4		5.0-5.4	4	4
9.5-9.9		4.5-4.9	4	3
9.0-9.4		4.0-4.4	8	
High	18.9		8.7	9.6
Mean	16.3		5.9	6.9
Low	15.0		4.0	4.7

NOTE: In this table the reading grade is matched with the normal age for the grade; i.e., a child who begins first grade at six should read at fourth-grade level when he is nine. Fifteen is the normal age for tenth grade in Trenton.

The adjectives used by Humphreyville in classifying pupils with IQ's below 80 were in reference to Stanford-Binet groupings, whereas the IQ's of the group described in this article were derived from the Terman-McNemar group test. Even though the same descriptive terms may not be exactly applicable here, the fact remains that the 52 pupils constituted about one half of the lowest twenty per cent of the entering sophomore class in intelligence. Their course of instruction consisted of five 48-minute periods per week for the first semester of the school year, at the end of which time their places were taken by the other half of the group of gravely retarded readers in their class. They were all very dull pupils with serious retardation in reading ability. The range of their IQ's (Figure 1) was from 85 down to 50, with the mean at 66.7.

The mean chronological age of the 52 pupils in September was 16.3, a year older than the mean age of the class as a whole. Three were over eighteen years of age. The results of Form R of the *Metropolitan Test*

showed all pupils to be seriously retarded in reading ability. Table I shows that the range of their reading grade scores in September was from 4.0 to 8.7, with the mean at 5.9, an average retardation of four full years (actually 4.1) below their grade level.

PROCEDURES IN REMEDIAL INSTRUCTION

This gravely retarded group of 52 pupils concentrated for one semester on learning to read more efficiently, postponing most of their study of English usage and composition until the following year. The next few paragraphs present a synopsis of the remedial teaching procedures to which they were subjected from September 1953 to January 1954. No claims of originality are made for the techniques which were employed. The activities listed are merely those that were deemed most essential and most likely to produce favorable results in the time allotted for instruction.

Awakening the Pupil's Interest

Little can be accomplished in remedial reading unless the pupils can be made to want to improve. At the outset, the instructor tried to convince them that better reading ability would help them in their vocations after leaving school; would increase their understanding and enjoyment of sports; would aid in their appreciation of moving pictures, television programs, and picture magazines; would help them to make use of the facilities of the public library; and, finally, would aid them in winning respectable status from adult people in the community, who are certain to express their opinion of the educational achievement which these pupils will exhibit after leaving high school.

On the job in the near future, the instructor explained, some of these pupils would have to be able to read blueprints; and nearly all would have to be able to read printed directions in order to carry them out; for instance, in assembling the parts of electrical appliances in a Trenton factory. He reminded them that, while participation in sports is enjoyable, much vicarious pleasure may be derived from reading the sports sections in the newspapers and also from reading biographical material in the magazines about the star players in the pupil's favorite sports.

The instructors showed them such films as *David Copperfield*, *Mutiny on the Bounty*, and *Drums Along the Mohawk* and tried to transfer their interests from the film to the printed page. A selection of such books, many of them rewritten in simplified vocabulary, was available to them in a special collection on shelves at the back of the classroom. Some of them were purchased for the remedial work, while others were procured on loan from the Trenton Public Library. The collection available in the classroom was usually limited to about one hundred volumes for ease in handling.

Diagnosis of Individual Difficulties in Reading

The classes for retarded readers were kept small (about twenty in each section) so that the instructor could devote a suitable amount of time to the diagnosis of individual difficulties in reading. Each pupil frequently took his turn at reading orally from *Let's Read*,⁴ so that the instructor could gauge the pupil's ability to associate the visual perception of words with their aural reproduction. The oral readings also revealed faulty pronunciation, faulty phrasing rhythm, and inadequate word-meaning associations.

Besides reading orally, the pupils were also required to read passages of material written in vocabulary of gradually increasing difficulty and to answer multiple-choice questions about the central thoughts of the paragraphs. While they were thus reading silently, the instructor watched them for tell-tale signs of eye reversions, lip-reading, and finger-pointing—all bad reading habits which tend to slow down the rate and to interfere with full comprehension of meaning. Simple exercises in rhythmical choric reading led by the teacher were often employed to help the pupils to forget their faulty reading habits.

The pupils were also invited to furnish testimony concerning their past experiences with reading. The small classes were favorable towards personal confidences of this sort; but they were also encouraged to write about their parents and their homes, their achievements in school, activities in which they felt that they had excelled, and activities in which they had failed. Such writings afforded them the opportunity to express any emotional attitudes or blocks which they had acquired towards reading in their earlier school years. They also had the opportunity to tell why they had come to high school, what they expected to get from it, and what sort of employment they expected to enter after leaving. Thus, the oral reading, the silent reading, and the autobiographical writing served to acquaint the instructor with the individual reading difficulties of his pupils and enabled him to prescribe treatment for them on a friendly, person-to-person basis.

Building Vocabularies

The instructor soon decided that, because the vocabularies of his problem readers were so extremely limited, anything he could do to enlarge them, either indirectly through reading or directly through teaching spelling and the use of the dictionary, would be justified. He made sure that they knew the alphabet and taught them how to find the meanings of words and their correct pronunciation in the dictionary. The use of guide words was explained, and dictionary drills were frequently given to the whole class. Each pupil was provided with a list of the 3,000 spelling words having the greatest frequency of usage according to *The Teachers Word Book of 30,000 Words* as compiled by Edward L. Thorndike and Irving Lorge. Added to these were 300 other words that

⁴Roberts and Rand, *Let's Read*, Henry Holt and Co., 1937.

are frequently misspelled. The pupils had a spelling lesson once a week and kept all of their spelling papers and compositions, with the misspelled words, which had been marked and rewritten, in individual folders in a cabinet at the front of the room so that from time to time they could assess their rate of progress in spelling and vocabulary building.

Reading rate

It was necessary to teach these pupils to read faster and to fix their attention upon their readings for longer periods of time. Exercises in speed of reading helped them to form better habits of concentration. They were given material of average difficulty such as may be found in *The Readers Digest* and were instructed to read for exactly two minutes by the clock; then they would circle the word where they had stopped, count the number of words they had read, and divide by two to determine their rate. In the next two minutes they would race to better their own records. Gradually they would try to lengthen their attention span by reading for three minutes, four minutes, or five minutes without stopping. Targets in reading,⁵ which provides exercises for developing comprehension as well as speed, is useful for this kind of work.

Comprehension

Because he wanted to direct the understanding and appreciation of his charges towards whole books of better quality, the teacher devised study questions for which individual pupils were encouraged to find the answers and report them orally or in writing to the class. This was found to be one of the best methods for developing comprehension because it provided the pupils with a motive for reading. They felt both pride and satisfaction when they were able to find suitable answers to such questions as "Why is Davy Crockett a hero to Texans?" and "How did the yearling fawn help Jody Baxter to grow out of his childhood?" In similar manner, they learned valuable lessons in personal achievement, sportsmanship, and American citizenship by reading books about Babe Ruth, Charles Edison, the Wright Brothers, Babe Didricksen, and Charles A. Lindbergh.

Teaching English Usage

Although the primary objective was to overcome reading handicaps, errors in language usage could not be ignored. No effort was made to teach grammatical rules and generalizations; but bad usage, whether oral or written, was corrected as conscientiously as in any English class. The instructor marked the errors which he found on compositions, and the pupils were required to correct them in writing. He found it necessary to provide simple drills in punctuation and capitalization, and in the correct use of the forms of verbs, adjectives, adverbs, pronouns, and nouns. For this purpose, *Vocational English*,⁶ a textbook with a very

⁵Linda E. Barry, Mable Madden, and Majorie Pratt, *Targets in Reading*, Webster Publishing Co., St. Louis, Mo., 1938.

⁶Albert Jochen and Ben Shapiro, *Vocational English*, Globe Book Co., New York, 1953.

practical approach to the study of language, was employed. However, the teaching of English usage was only incidental; the major portion of time was devoted to the improvement of reading techniques.

English Composition

Every pupil in remedial reading was required to write, and afterward to revise satisfactorily, a letter of application and a friendly letter, so that he would understand the proper form and content for letters after graduation from school. The pupils in this group were not asked to write any original narratives other than their autobiographical sketches. Neither did they write any original expositions, but they were required to write short summaries of expository articles in order to fix their comprehension of the central thought. For exercises of this type, *Modern Reading*⁷ was found to be a useful text. The pupils kept their précis writings in individual folders so that the instructor could find them readily when he found time to correct them.

CONCLUSION

The results of Form S of the *Metropolitan Reading Test*, when given in January after a little more than four months of instruction, revealed a mean reading grade score for the 52 pupils of 6.9—a gain per pupil of a full year in reading ability over the September mean.⁸ The lowest score in January was 4.7, as compared to 4.0 in September, and the highest was 9.6, nearly normal, as compared to 8.7 four months earlier. There were, however, still twelve pupils among the 52 who were reading below the sixth-grade level at the end of the period of instruction.

The conclusion that the remedial reading program accomplished worth-while results seems justified. When a classroom procedure results in an average advancement of a whole grade, or year, in reading ability in four months, *i.e.*, about double normal growth, whereas the average pupil in the class had previously achieved only sixth-grade reading ability in nine years of school, *i.e.*, about two-thirds normal growth, that procedure must surely be considered effective.

To be sure, the average achievement of the group at the end of the period of instruction was still regrettably low, but their limited mentality must be constantly borne in mind. The learning capacity and powers of retention of these children were very meager.

The data presented in this article show that the remedial reading program at Trenton High School is necessary and effective, but that it falls short of its goal; namely, normal reading ability for all pupils at a given grade level. As comprehensive high schools of the United States are constituted today, with compulsory attendance to the age of sixteen or older, there exists a continuing need for remedial instruction in reading; and a program such as the one organized at the Trenton Central High School constitutes a vital and indispensable part of the curriculum.

⁷Eleanor M. Johnson, *Modern Reading*, Charles E. Merrill Co., Columbus, Ohio.

⁸See Table I.

What Does the Future Hold for Literature Teachers?

LOUISE FORKE

"I SAW that story on TV the other night," commented a student in my freshman English class, and about twenty other students added in unison that they, too, had seen the same presentation. Seeing a play on TV, or at the movies, seems more impressive than just reading the selection from the text book. The reaction of the student shows that he remembers it and seems to have a better understanding of the plot, setting, and characters involved. They are seeing the play, hearing the lines, and at the same time they are being entertained. Even the slower students have an understanding of the story, and they can recall it at a later date with a fair amount of accuracy. They are enjoying a pleasant learning situation.

To read just for enjoyment has almost become a lost art for our teenagers of today. Very few ever mention in their conversations anything about a good book to read, or what the latest best seller might be. The mere suggestion of a date in the near future for a book report sends the entire class off in a rush to the library to check out a book because they "have to read a book for an assigned report."

Our modern anthologies that are selected for us to use as textbooks in our classrooms have only a smattering of pictures throughout the usually thick volume. In order to create more interest and help the pupil with a limited background of learning experiences, we must find all available audio-visual aids. We need all that we can find to make the class more interesting and informative.

In order to help the students have a better understanding of the settings for the stories in class, we can construct models that represent that particular locale. Often students are urged to find pictures that illustrate different characters and settings, but the magazines in the library usually become so ragged that such assignments have to be discarded.

There are a vast number of filmstrips and movies available on literary selections, but a limited budget makes it hard to have a sufficient number for a complete course in literature. The recordings that are available are very good, but those too can be purchased only in a limited number.

Louise Forke is a Teacher of English in the Teague High School in Teague, Texas.

Since watching television is a favorite pastime of our teenagers today, a survey shows that a great majority of students prefer watching the various theater presentations. This makes it very easy to ask the class to watch one certain program and have a lively class discussion the next class meeting. Perhaps television is the answer to the problems of the literature teacher, for it has all the mediums of effective teaching. Our textbooks do not have adequate illustrations, and they fail to mention a wide selection of economical aids to be used with them. While watching a TV presentation, the student sees the work of the finest writers, producers, and actors.

Freshman literature seems to be the most difficult course found on the schedule of the ninth-grade student. In the past it has caused more lower grades to appear on report cards than English classes at any other level in high school. More interested parents have inquired about that low English grade and have asked about ways to assist their children in improving their grade. It seems to be shocking to the student, for he seems to struggle to analyze the selection he has just read. He tries desperately to decide what the author's purpose was in writing the selection. He tries to understand the form which the author uses to communicate his ideas and feelings, but he often stumbles when he tries to determine the significances of the thoughts and feelings the author communicates.

From an average class of thirty freshmen, I found only two students, boys, who said that they could understand the selection and enjoy it more when they read it. The other twenty-eight agreed that they could understand the selection and remember the story better when they saw it. This may result from the fact the reading level of the students in that class ranges from the fourth-grade to the eleventh-grade.

Since *Julius Caesar* was filmed and was shown in so many theaters, large and small, the average student has a better understanding of the Shakespearian play. This film has caused the students that I teach to have a greater interest in it, and they do not dread the thought of having to study the play.

Seeing a play, or any other presentation of a literary selection, has more appeal and presents a better learning situation for the average freshman from the small town than reading the selection from the book. Perhaps, if we had enough anthologies to conduct a freshman literature class on three or four different reading levels, similar to the method used in the elementary grades, we might be taking a step in the right direction. Probably the greatest obstacle would be in finding on selection by the same author written on the various levels for a class study and discussion.

What does the future hold for the literature teachers? Will it be "seeing and hearing" a selection *versus* reading the selection from a book, or the medium of TV *versus* the classroom teacher?

Health Service Programs for Secondary Schools

INTRODUCTION

THE ultimate success of our American system of education will be measured in terms of the degree to which it has furthered the healthy physical, mental, and emotional development of our young people and their ability to live happy, productive lives in a world of widespread and rapid change. The excellence of the school's health program, then, is no less important in junior and senior high schools than it is in the elementary grades. This program should continue the elementary school's health supervision and health education efforts, and should supplement the health services rendered by the family physician and other community resources. The health program in the secondary school should aim to develop in students an increasing responsibility for their own health and for that of other members of their families.

The administration of a health program in a secondary school, and the policies of that program, should be so designed that the special needs of adolescents will be best met. Since both these young peoples' needs and the structure of junior and senior high schools differ from those one finds in the elementary grades, the secondary-school health program must differ in some details from that offered pre-adolescent children. However, just as in the elementary school, the secondary-school health program is founded on sound medical supervision, educational principles, and competent nursing service—those are essential. The recommendations of this Report are intended to indicate how the general principles of school health can be most effectively applied to adolescents.

What are the special needs of the adolescent, and what are the characteristics of secondary schools pertinent to the formulation of recommendations for their health program? Adolescence brings a few new ailments and others become more common or severe; it also brings out new attitudes, questions, and worries. These all require consideration if we are to give adolescents the best a school health program can offer. There

This is a report of the Committee on Secondary-School Health Services, School Health Section, American Public Health Association, composed of J. Roswell Gallagher, M. D., *Chairman* and the following members: Alan Foord, M. D.; Eunice Lamona, R. N.; Thomas Shaffer, M. D.; Mary E. Spencer, Ph.D.; Regine K. Stix, M. D.; Marie Swanson, R. N.; Ruth G. Taylor, R. N.; Lorna Thigpen, Ph.D., R. N.; Helen T. Watson, R. N.; and Marjorie A. C. Young, D. P. H.
March 4, 1955

needs to be a shift in emphasis from the problems peculiar to the earlier years to those which are of particular concern to adolescents. Acne; dysmenorrhea; migraine; cardiovascular fitness; variations in rate, time, and extent of growth and maturation; osteochondritis; athletic injuries—these are a few of the matters of special concern and interest to the adolescent. So too are adolescents' thoughts and feelings about sex, conflicts in their homes, their own growth and maturation, their relationships to their parents, their assumption of the responsibilities and behavior expected of adults, their careers, and their acceptance by their contemporaries. The secondary-school health program must give all these consideration. Students in the secondary school are seeking independence and individual status for themselves, and, though increasingly able to assume responsibility, they often need adults outside as well as within their family circle to whom they can look for advice and support. They have many questions and worries involving their physical and emotional health which they would like to discuss with a sympathetic listener, and at times need an adult who has neither the close emotional tie of a parent nor the authoritarian position of one of their own teachers.

At this time, when adolescents need an adult's personal interest, their schools depart more and more from the elementary school pattern where a single classroom teacher has a close relationship to her group of children. In the departmentalized secondary school, "their teacher" is replaced by a number of teachers whose main function is the teaching of a *subject* rather than of the *people* who come to them as students. Many teachers instinctively help to correct this situation, and many schools have tried to meet it by including within their staffs counselors and psychologists trained in the art of helping young people. The adolescent's need for personal interest, however, is usually greater than this special staff can meet, and, since the basic aim of education is to help to produce the best adults possible, we urge that teachers and other adults become aware of those problems, thoughts, and feelings that diminish effectiveness and happiness in later life.

This Report is designed as a broad guide to high-school administrators, health personnel, and others who plan health services for students in secondary schools. Many schools will be unable to obtain the services of physicians, nurses, and others who have had the type of training recommended in this Report, or who can devote the time to a school program which is desirable. However, if use is made of all local and county health facilities, much can be done. Though the details of each health service and the facilities available locally may vary considerably, the committee recommends these basic principles for the secondary schools of every community:

- (1) That there be medical supervision of the school health program, with a continued emphasis on effective periodic health examinations, disease and injury control, health education, and the promotion of emotional health.

(2) That there be special attention to those ailments and physical needs common to adolescence which one must consider if these adolescents are to have optimum health.

(3) That because of the importance of the emotional health, those directing secondary-school health programs help to initiate and lend their aid to all efforts designed to promote a wider understanding of the effect of emotional factors upon learning, physical health, and effective living during adolescence.

(4) That efforts which provide those trained persons who are needed within a school if it is to have a program which will promote healthy emotional development be supported.

(5) That under medical supervision, school nurses continue to give the sort of co-operative leadership in this program which will furnish adolescents the greatest assistance with their individual health needs.

RECOMMENDATIONS

I. Personnel and Administration

Medical direction of health service programs in schools is essential, regardless of whether the school is in a rural or urban community and irrespective of what grades it includes. *As used in this Report, medical direction and supervision connote policy formation and health advisory service and not the direct services of a school physician which need not necessarily be provided within the school if available elsewhere in the community.* Medical and public health leadership in planning a school health program is always desirable. When such public health and medical supervision is not available locally, the assistance of the county or state health department should be sought. The importance of having a school health program founded on sound public health and medical practices and the necessity for integration of the school program with other health services in the community are paramount.

To meet the needs of the secondary-school student, there should be many persons on the school staff to whom he can readily turn for sympathetic listening and for help in regard to his physical, emotional, and social well being. These adults should be familiar with and sensitive to the needs of adolescents and should have a friendly, non-authoritarian relationship with them. The Committee believes, as do educators, that having counselors or student advisers easily available to adolescents is important. These counselors should have available to them sound medical and public health advice and should know how to use it. Such help as they can render should *supplement*, but never replace, the services of the physician and the school nurse in matters relating to student health. We wish to emphasize the need to provide a variety of persons to whom adolescents can go in confidence and without hesitation, and to emphasize the importance of the health service's support of those efforts along the lines that have long been the concern of many educators. Insofar as physicians, nurses, deans, and guidance officers can fulfill this need, they should. We believe, however, that, in addition, there is a real need for a number of readily accessible teachers

who are cognizant of student needs and who are available to students for conference. It need hardly be added that this Committee believes that the effect and importance of day-to-day student-teacher relationships upon the development of adolescents' personalities can never be over-estimated.

A. The Physician and the Nurse

The physician serving the secondary school should meet the qualifications of school physicians outlined by the American Public Health Association.¹ Both he and the nurse should be considered as members of the school staff whether they are employed by the health department or education department. His knowledge and experience should extend to well and sick children, and he should be sufficiently familiar with present-day educational and public health methods to use them effectively in his work in the school. In addition, it is particularly important that he should understand the characteristics of adolescents and the nature of their physical and emotional problems.

The nurse working in the secondary school or acting as a public health consultant to the school should meet the qualifications outlined by the National League for Nursing.² In addition, special emphasis should be given to the satisfactory completion of a program of study and supervised field experience dealing with the problems and the nature of adolescents. If continuous nursing supervision is not available to nurses in secondary schools, they should have completed at least two years of progressive experience in a public health agency providing an acceptable standard of nursing supervision.

Under the direction of the school medical adviser, physicians and nurses should participate in the health program of the school in the following ways:

- (1) By giving direction in planning, and by implementing a program of periodic health examinations including the follow through of all recommendations emanating from them.
- (2) By serving as consultants to teachers and students on problems of personal health and health education.
- (3) By assisting the administration in fostering the emotional health of teachers, recognizing that the impact of their personalities and attitudes upon students is a factor in the school environment very relevant to students' emotional development.
- (4) By assisting in coordinating the school health program with the community health program.
- (5) By advising the school administrator concerning epidemic control, sanitation, safety, lighting, ventilation, nutrition, lunchrooms, planning of a proper health unit within the school, demands of the school day upon the students and staff, and staff health.

¹Report on Educational Qualifications of School Physicians." *American Journal of Public Health*. Vol. 43, January 1953, pp. 75-82.

²*The Nurse in the School Health Program*. Public Health Nursing, August 1949, distributed by the National League for Nursing, Department of Public Health Nursing, 2 Park Avenue, New York 16, N. Y.

B. The Counselor

Not only ignorance of facts but also fears and conflicts interfere with the adolescent's effort to live a healthy life. Instruction and motivation, however good, cannot resolve all worries. Each student should, therefore, have available to him one or more adults to whom he can talk freely about his problems and interests. The secondary-school health service should aid the school in finding and developing those of its staff who can help to satisfy this need.

Such a counselor will regard personal problems sympathetically and will guide rather than advise. To him or to her a student's emotional health is as important as the acquisition of knowledge. He does not settle problems; he listens to them and suggests ways or people to help with them. In short, he supplements and aids the efforts of the student's family, his church, his club leaders, and his school's formal counseling and health service.

Listening takes time. Teachers of fused, integrated, or core courses meeting for half-day periods and interested in and suited for counseling could probably be made available to from sixty to eighty students. Home room teachers meeting their counselees a full period daily could effectively use a group discussion as a means of meeting some of the more common problems. Such teachers will require a yearly average of at least one hour per student for this assignment and those who teach a traditional high-school schedule will need a yearly minimum allotment of two hours per student. Besides time for teaching and for this type of counseling, provision must also be made for arranging referrals and for participation in conferences with coordinating officers such as school physicians, nurses, representatives of advisory and cooperating agencies, deans, and members of the full-time guidance and counseling staff.

Administrative provision should be made for this program. Policies and procedures should be designed for (a) the *ready transfer of a student from one counselor to another* when either the counselor or the student feels that a good working relationship is not possible, and (b) the correlation of all the counseling and guidance of each student through his designated counselor and the coordination of each counselor's activities with those of other school personnel and community agencies.

Schools whose budgets permit may wish to free teachers from other duties so that they will be available for conferences with students. Much, however, can be accomplished in any school if its health service will (a) lend support to all who appreciate young people's needs, (b) help in every way to increase all teachers' awareness of the nature and importance of adolescents' emotional health, and (c) assist educators in their efforts in this area.

C. Staff Education

Many school systems will need to establish in-service courses for the development of such counselors. It is suggested that courses for developing "sympathetic listeners" be modeled after the "Child Study Course" as developed by Prescott, in which the teachers study some one pupil intensively, keep a written record of observations over the period of a year, and meet approximately every two weeks as a group with a trained leader to discuss their observations. Such a course should be open to all those working with adolescents in the school setting, including vocational guidance counselors, principals, physicians, nurses, health and physical education teachers, social workers, psychologists, and attendance officers. The inclusion of these various disciplines not only provides for broader discussion and dissemination of information, but also provokes consideration of the close working relationships which are so necessary if representatives of these disciplines are to combine their skills for the benefit of all the pupils.

A sound school health program involves the entire school staff. An informal program of health education should be carried on in faculty and health council meetings throughout the year. As student problems are discussed, participation by the medical, nursing, guidance and administrative staffs, and teachers can do much to further an understanding of adolescents. Studies of absenteeism, surveys of the over-all school health program, reports on the findings of screening programs, and discussion of the health problems of the community are all activities which serve to keep the school personnel aware of health activities in the school and abreast of developments in community health.

Teachers, guidance personnel, administrators, nurses, and physicians should be given whatever time and encouragement are necessary to ensure their attendance at meetings, in-service courses, and summer workshops designed to better their ability to improve the well-being of each secondary-school student. Universities, teachers colleges, and health and education departments should recognize their responsibility to provide such meetings, courses, and workshops.

D. Responsibility for Attention to Recommendations

It is essential that all persons (physician, nurse, guidance officer, counselor, and referring teacher) concerned with the welfare of a specific student plan together for the allocation of responsibility for a student's problem. When this is done, there will be no duplication or confusion in giving attention to recommendations which have been made.

The nurse should hold regularly scheduled conferences with teachers, counselors, guidance officers, and deans so that the health of any student in his care can be discussed. Sufficient time must be allocated to this function so that there may be provision for communication between these people, all of whom are concerned with students' health and welfare.

E. The School Health Council

Membership in a School Health Council within a high school should represent all those in the school and community with a concern for student health, including student delegates, parents, the administrative staff, medical and nursing staff, health advisory group, teachers, coaches, and lunchroom and custodial staff.³ Too much emphasis cannot be given to the participation of students in the planning and operation of this program which is so vital to them. This Council should be primarily concerned with student health and, therefore, should concern itself with the interpretation and solution of student problems. Through participation in the council, students learn about community and personal health problems in a realistic setting and have an opportunity to make their own needs known.

II. The School Environment

Though the school environment is primarily the responsibility of the school administrator, the school health service should cooperate in seeing that it meets all health needs and requirements. Both the physical and emotional aspects of the school environment must be given careful consideration.

A. Physical Environment

Health personnel should concern themselves with the inspection of school buildings and playgrounds, and should be available for consultation in planning new construction. Standards for the lighting, ventilation, floor space, interior decorations and furnishing of schools, and excellent descriptions of modern school sites and construction are available. It must be remembered however, that despite expert planning, equipment, and maintenance, the standards and conditions maintained in each classroom will depend to a considerable extent upon the teacher in charge of it.

High schools should have a health suite. This suite should include a waiting room, dressing rooms for students, private examining rooms, and separate offices for the physician and for the nurse. This will permit simultaneous conferences with students, conserve medical and nursing time, and will insure the student of privacy. Acoustic treatment of the ceiling and part of the walls will make the health room adequate for audiometry if it is located, as it should be, in a relatively quiet area. The health room should be near the guidance office and central files of the school, so that school and health records can be easily coordinated.

By locating the health center near the administrative offices, the supervision of acutely ill students will not depend solely upon the nurse, who may not always be present in the school. Rest cots should be so placed within the health unit that privacy may be afforded.

³"Report of Committee on the Relationship of Voluntary Agencies to the School Health Program." School Health Section, APHA Newsletter, *AJPH.*, Vol. 39, No. 3, March 1949.

B. Emotional Environment

Though a good physical environment is highly desirable, the emotional tone of each classroom is of even greater importance to students' well-being. Teachers' attitudes influence every student day after day. Though a student's problems may be partially resolved under the guidance of an understanding teacher, on the other hand, they may be aggravated by a teacher whose own problems unfavorably affect his or her relationship to students. Cooperation between the school administration and the school health service can go far to improve the emotional environment in the schools by joint planning for teacher pre-service and in-service education, by promoting efforts designed to screen the applicants to teachers' colleges, and by providing opportunities for the health personnel to interpret to teachers the dynamics of interpersonal relationships between student and teacher.

III. Medical Aspects of the Service

A. Records

A cumulative health record should accompany the student from kindergarten to graduation from high school. Procedures should be instituted to facilitate the transfer of records from school to school. Developmental data, medical findings and treatment, immunizations, the history of significant illnesses or injuries, and physical and emotional needs should be recorded. Most nurses prefer to segregate the records of students needing care or to use a separate tab system. An index file used as a tickler system keeps the actual record in its proper place in the files.

It is not practical to have a single record for use by both health and teaching personnel. In order to avoid misunderstanding, medical findings should be interpreted to teachers and counselors by the physician or the nurse. Significant facts should be recorded by teachers or counselors on the teacher's observation record. Each student's total school record should include, in addition to the academic and medical portions, the observations of teachers and counselors.

Tabulations of students' accidents and illnesses should be available as a basis for the content of health teaching in the schools. Teaching which is based on real problems is meaningful. Student health records are an invaluable source of this type of material.

B. Health Examinations

1. Frequency. One thorough meaningful examination is much to be preferred to several hasty yearly inspections not only from the standpoint of technical quality, but also because of the importance of teaching young people to respect and value the health examination. It is unusual to have available sufficient personnel to permit annual examinations to be of high quality.

Thorough health examinations made by the family physician should be encouraged. Reports of these examinations should be available to the

school health service. In addition, reliance should be placed on annual screening, non-diagnostic types of examinations, on the observation of pupils by everyone who comes into contact with them, and on conferences among medical personnel, teachers, and parents. The limitations of medical examinations carried out without the help of specialized personnel and without laboratory facilities need to be remembered whenever school medical examinations are being considered.

2. *Priorities.* Medical examinations should be given the following order or priority: (a) students referred by themselves, by their parents, or by members of the school staff; (b) students new to the school system for whom no record of a health examination within the preceding three or more years is available; (c) students leaving school before their next scheduled health examination, or requiring examination for employment certificate; and (d) pupils who have not been examined during the three years prior to graduation from senior high school. The time chosen for re-examination should be such as to allow for at least one year's time before graduation so that recommendations may be followed through.

The health examination should be thorough.⁴ The physician should have available to him the cumulative records with results of screening examinations (audiometry, vision testing, height and weight, chest X-rays), as well as the teacher's and counselor's observations. The examination should be a favorable educational experience for the student. The practice of having parents during the examination, so desirable for elementary school children, is not recommended for the high-school age group. Students of this age should be encouraged to take an active interest in and responsibility for their own health, and should be given every opportunity privately to ask questions concerning their health, and should be made to feel it is their own examination. However, the cooperation and interest of parents in the health service and in their children's health should be encouraged. Information and questions and requests should be solicited from them; and the students' needs (preferable in the students' presence) should be discussed with them.

3. *Referral Examinations.* Health examinations based on a referral from a teacher, counselor, nurse, or parent or on a request from the student himself should take precedence over periodic examinations. Teachers' observations are an integral part of the referral system. There should be no limit to the frequency of referral examinations.

Students should be encouraged to seek appointments with the school medical adviser. If previous health examinations have been ideally conducted, a good student-physician relationship will have been established. No questioning or obstruction should be put in the way of an adolescent

⁴For the content of a health examination see: George Wheatley, M. D., and Grace T. Hallock, *Health Observation of School Children*, McGraw-Hill, New York, 1951, and J. R. Gallagher, *The Health Examination of Adolescents*, *New England Journal of Medicine*, 229-315 August 1948.

who asks a teacher, counselor, nurse, or dean to arrange an appointment for him or for her to see the school physician. It should be assumed that any adolescent who asks to see the school physician has something of importance to himself on his mind and something which he would prefer to discuss with the physician rather than with any other member of the school staff.

4. *The Follow-Through of Recommendations.* The contribution of a school health service is measured both by the extent to which students' attitudes, behavior, and physical and emotional health are influenced for the better and also by its success in obtaining the correction or amelioration of any matters detracting from a student's health. Personnel in the school health service should help students and their parents to understand the significance of health examination findings and assist them to obtain whatever attention has been found necessary. In this aspect of the program, the nurse plays a major role in liaison between the school, the home, the family physician, and other community resources.

C. *Examinations for Athletic Teams*

Candidates for athletic teams require more frequent examinations than those not participating in athletics. These examinations should primarily attempt to detect any impairment of the cardio-vascular, respiratory, skeletal, and muscular systems which would interfere with fitness for athletics.

The examination of athletes, and all medical provision for them, should be under the supervision of the school health service. These examinations, when beyond the scope provided for all students, may be considered the financial responsibility of the athletic program, but the medical responsibility rests with the health service. The results of these examinations should be part of the student's cumulative health record.

Candidates for teams should be examined before the opening of each sports season, after recovery from an illness or injury, whenever the activity seems to be inimicable to their health, and at the close of the season. The correction of injuries which have occurred during a season is just as much the concern of the health service as is the condition of the athlete prior to engaging in a sport. The coach of a team has the same responsibility for the diligent sort of observation that detects impaired health as do teachers; and he, as they, must be governed in all health matters by the school physician's and the family physician's recommendations.

IV. *Screening Procedures*

A. *Screening for Impairment of Vision and Hearing*

1. *Vision Tests.* Annual screening of the vision of all secondary-school students by properly trained personnel is recommended. The nature and content of the screening method is still a matter upon which experts disa-

gree, but it is reasonable to suggest that it should include a test for color vision (but only if this has not been previously determined), a test for visual acuity, a test for farsightedness (hypermetropia), tests for muscle balance (heterophoria), and questions regarding symptoms of eye strain.⁵ Blurring of vision, complaints of eyes "being tired," headache, and other symptoms of eye strain warrant referral even if the vision screening tests are "passed."

Persons responsible for giving the test should be trained to give it under standard conditions. Greater efficiency will result when, prior to the screening examination, standards for referral have been set in cooperation with the local eye doctors to whom students are likely to be referred. All teachers should be aware of such signs of eye strain as a scowling expression, blinking of the eyes, tilting the head to one side, cupping the eyes with the hands, squinting, holding a book close to the face.

The answer to the question of who should do the vision screening depends upon what test is used and who is available to do the testing. Classroom teachers or the school nurse can readily be taught to administer tests which are comprehensive though far from complicated.

2. *Hearing Tests.* The teacher can often call attention to the need for individual hearing tests. Mass testing, however, is usually done by a person especially trained for this work. The ideal method for testing hearing is an individual pure-tone test given with a discrete frequency audiometer. Unfortunately the fact that this method is time consuming precludes its use in many schools. Group pure-tone tests screen hearing satisfactorily on a mass basis. Many school systems have compromised by first using the best group test available, and then giving the individual pure-tone test to selected cases; others use individual sweep-check screening. Audiometer testing should be done in an acoustically treated room. When such a room is not available, the quietest room in the school building should be used.

Hearing tests should be given by a person trained in the techniques of audiometry. Several states have established a civil service title "Audiometrist" with qualifying training and examinations for such a technician. The Massachusetts Joint School Health Council recommends that a specially trained person, neither a nurse nor teacher, be employed for giving hearing screening tests. Some cities meet their needs by delegating this special assignment to one nurse or teacher who has received training in this technique.

Regardless of who gives the test for vision and hearing, there must be a close liaison among the physician, the nurse, counselors, and teachers, since the latter must be continually aware of student behavior and performance. Concurrent health education for both students and parents

⁵"Standards for Referral of School Children for an Eye Examination." Committee of the New England Ophthalmological Society, et. al. *American Journal of Ophthalmology*, Vol. 37, No. 5, May 1964.

is essential to insure adequate subsequent attention to the results of testing and to develop a well-rounded health program in vision and hearing.

B. Other Screening Procedures

1. Weighing and Measuring. Measurements can be meaningful and helpful only if carried out and the results used and interpreted in a thoughtful manner. Height and weight should be measured and the results entered on the cumulative health record. This may be done by members of the physical education or health education staffs in the course of their participation in the student's health examination.

Adolescents' anxiety about their growth and development should be kept in mind by those who make and record these measurements. Careless remarks about, or comparison of, any individual's size to published standards should be avoided. The *interpretation* of these measurements should be made only by the medical staff. Every effort should be made by the doctor to explain to those who are well but who deviate from the average in weight or height either that their size and development is satisfactory or in what ways it might be improved. This furnishes an excellent opportunity for effective health education. It is a subject in which adolescents have a real interest.

It is desirable to know when adolescents are in the period of rapid growth and when they have passed it, and also when they are accumulating weight more or less rapidly than their growth calls for. Height and weight measurements are useful for these purposes if taken sufficiently often to reveal changing trends, at least every six months, and preferably at the beginning, middle, and end of the school year. To reveal their significance they should be plotted against some kind of range data, which will reveal the characteristics of the progress being made by the individual. The words "average" and "normal" should never be used in interpreting these measurements. The former is a meaningless, statistical abstraction; and the latter can rarely be used with assurance and will usually be interpreted to mean more or less than is intended.

The interpretation of height and weight should take into account the individual's constitutional type, heredity, stage of development, physical fitness, and dietary habits. Adolescents usually are interested in, understand, and appreciate straightforward, thoughtful explanations of their physical characteristics, of their potentialities, and of ways to improve their health.

2. Dental Case-Finding. Adolescents attending secondary schools require no less dental attention than do elementary-school pupils. A program of health education, health guidance, and efforts to provide care for those in financial need will all help to bring adequate dental care to them. It is essential too that there be a careful system of follow-up by the nurse or other appropriate person. Provision should be made for excusing secondary-school students for visits to private dentists and to dental

clinics during school hours if no other time is available for such appointments.

3. *Tuberculosis Detection Program.* The National Tuberculosis Association recommends two types of case-finding programs for use in high schools: (a) chest x-rays followed by other diagnostic procedures where indicated; or (b) tuberculin testing followed by a chest X-ray for all positive reactors. This program should follow each community's general policy. The Committee recommends either (a) or (b) for all students leaving secondary school (regardless of grade level) and for students above the ninth-grade level who participate in athletics. Studies by the various Tuberculosis Associations throughout the country suggest that mass testing procedures at the junior high-school level are inefficient.

4. *Urinalysis.* Adequate laboratory facilities should be made available or multiphasic screening services utilized, so that there may be a test of the urine for sugar and albumin as part of the periodic health examination. Every student with a family history of diabetes should have a yearly urinalysis.

5. *Hemoglobin Testing.* One of the screening tests now recommended for use with high-school girls is that of hemoglobin testing by an approved method. In a screening examination micro methods may be used. Hemoglobin testing as a screening device is not currently in general use, but, when the family physician gives the periodic health examination, or when students are referred on a selective basis, it may be requested.

V. Accidents and Other Emergencies

A. Accident Prevention and Safety Education

Accidents are by far the leading cause of death in adolescence. Plans for safety education, accident prevention, and the care of emergencies should be a responsibility of the health council of each individual school and the business of the entire school.

1. *Prevention of accidents.* Every effort should be made to protect secondary-school students against accidents in halls, classrooms, laboratories, the gymnasium, and on the athletic fields. There should be adequate lighting in halls and on stairways, and effective measures for fire prevention throughout the building. Shops and laboratories equipment should be designed to protect the student at work, and safety devices, such as goggles, should be provided and their use insisted upon. The department of physical education and athletics should share the responsibility for the safe condition of equipment and playing fields.

2. *Safety Education.* The periodic study of the causes of accidents and illness is useful in reducing their frequency and providing material for student safety education. Safety education should be incorporated into the instruction in such courses as health education, shop, home economics and laboratory science. Posters depicting the hazards of fire, swimming,

ice, hunting, etc. should be displayed freely.⁶ Driver education courses are recommended as a very important contribution to reducing the number of automobile accidents. Swimming instruction should be offered to all secondary-school students, and they should be urged to avail themselves of it.

B. Care of Emergencies

Every teacher and other employee should be thoroughly acquainted with the principles of emergency care. Several members of every high-school staff should hold First Aid Certificates.

Because of the complexity of the secondary-school organization, the age of the students, and special hazards of laboratory and shop, there is need for the development of a set of instructions for each secondary school. These emergency instructions should be based on the same general policies which govern instructions for elementary schools. To insure their understanding and support, and because of legal implications, their approval should be obtained from the board of education, the school's medical advisory committee, and the department of health. "Standing orders" incorporated in the instructions should be approved by these groups and signed by the school physician.

It is important that the school have accurate, current information on how to reach parents in case of an emergency. It is well also to have such additional information as the name and address of the family physician, the hospital of choice, and the name of another adult capable of assuming the parents' responsibility in case the parents cannot be reached in an emergency.

First aid cabinets should be located in the health room, gymnasium, the kitchen, garage, shops, and laboratories. Each cabinet should contain instructions for the care of emergencies. There should also be specifications regarding the types of injuries to be cared for at the station—those for whom a first aider, nurse, or physician is to be summoned; those who are to be taken to the health room; and those for whom an ambulance is to be called.

Plans should be made to insure the instruction of all new employees in safety, accident prevention, and first aid, and for refresher courses for all staff members, with special provisions for those most likely to be confronted with the management of accidents.

VI. Exceptional Children

The secondary school is faced with the problem of providing special facilities for exceptional (handicapped) children. Programs of special education designed to meet the needs of these adolescents differ in some respects from those designed to meet the needs of elementary-school children. High-school students will soon face the realities of job finding

⁶Posters and other materials are published by the National Safety Council, the Boy Scouts of America, The National Rifle Association of America, etc.

and of adult living. Their preparation for these is a matter of primary concern. They may have mastered some fundamental skills, but may still need individual attention in order to prepare themselves for adult life. The fact that adolescents resent being dependent or different will need to be kept in mind, as well as the importance of their learning to accept themselves and their handicaps. In short, added attention will need to be given to their emotional, social, and vocational adjustment.

Information regarding the nature and degree of the handicap and the student's adjustment to it should be made available from the elementary-school cumulative health and school records. A periodic re-appraisal of each student by medical, teaching, and guidance personnel is essential to the student's optimum adjustment to all phases of the school program and so that realistic plans for his future career may be made. To provide this, the secondary-school health service, the specially trained teachers, and the guidance personnel must work cooperatively. Physical facilities such as ramps, elevators, and special furniture and equipment are usually necessary.

Many small high schools in rural areas do not have ready access to the specialized personnel, facilities, and materials needed by handicapped students. However, if full and imaginative use is made of all existing community and county resources, student needs can usually be met. This will require the coordinated efforts of local and state educators, physicians, nurses, public health personnel, social and welfare workers, and members of volunteer groups and service clubs. In every state and territory, the official crippled children's agency and the division of vocational rehabilitation offer advice and will provide diagnostic, treatment and rehabilitation services for adolescents with handicaps.

Educational programs for handicapped adolescents should be organized so as to minimize segregation and stigmatization. Whenever possible, and within the limits of their abilities and disabilities, these students should be integrated into all appropriate activities of the secondary school. Special classes, where they exist, should be utilized only when necessary and every student should spend as large a part of his school day as possible in regular classes. Since after graduation the vast majority of handicapped adolescents will be expected to live with people who do not have such handicaps, the fundamental objectives of the secondary school should be to prepare each student for independent living and to develop his ability to share fully in the life of his community.

Mental Health and Material Progress

HAROLD H. PUNKE

TWO divergent aspects of American life attract attention: availability of material goods and related services; and percentage of the population entering institutions for mental illness. Most Americans realize the importance of automobiles, television, packaged foods, air travel, penicillin, hair curlers, and other material items. Fewer realize the large percentage of our hospital beds which are occupied by nervous and mental patients, or the estimates of professional workers that one person in every twenty will at some time in life be such a patient. Improved and more abundant material goods have increased our satisfaction of life—during the past generation, but admission to mental hospitals may not indicate personal satisfaction by patients or strength in the social order.

Are the aspects of American culture which give us an improving and enlarging stream of material goods related to other aspects which produce mental illness? If so, it behooves us to develop a better understanding of the relationship involved. Following paragraphs consider some of these relationships.

I. INDIVIDUAL ADJUSTMENT AND SOCIAL PROGRESS

Some types of social change greatly affect individuals. One such type has followed the accumulation of objective information on child development. The child-study movement has been related to a larger humanitarianism and reaction against exploiting children—and making them small editions of adults. Objective techniques for estimating various capacities have documented the importance of individual differences for many situations. This has supported our theory on the nature and status of the individual in American society—with some individualization of education. More emphasis on separate recognition of each person has resulted.

Individualized attention to children is easily accompanied by a demand for individual achievement—as essential to individualized recognition. For such recognition there must be bases for differentiation among persons, and achievement in school or elsewhere may be one basis. To individualize means to separate or to make stand alone in some respect.

Harold H. Punke is Professor of Education at Alabama Polytechnic Institute, Auburn, Alabama.

STRONG INDIVIDUALISM AND WEAK MORES

Historians often refer to America's pioneer life as stimulating individualism and the rise of the common man in our political system. Frontier settlement by individual families and small groups, with great self-sufficiency in the small group, probably helped develop the idea within such groups that they did not need regulation from without. The desire of early immigrants for personal freedom from religious and political tyrannies strengthened individualism and the average man's status.

A strengthening of individualism means a weakening of the *mores*. The notorious disrespect of frontiersmen for the customs and laws of "older regions" is illustrative. But *mores* and law can support a growing personality—as well as restrain it. Fixed community practice reduces the areas of daily living which demand continuous alertness—one knows in what ways he can depend on different persons and relationships. When there is no established practice, one must depend more on himself.

City slums are sometimes compared with the frontier—regarding limited control by law and *mores*, uncertainty of vocation and livelihood, and dependence for existence on individualized struggle. Juvenile delinquents and adult "outlaws" often inhabit slum areas, and may be produced by slum conditions—much as the James gang was once prominent in frontier Missouri, or the Ashley Mobley gang in the Florida Everglades.

In rehabilitating delinquents, welfare workers and probation officers frequently emphasize security of a job and life in a "stable" community—with broad social approval. Delinquent youth have often been left too largely to their own resources—too highly individualized in the frontier sense.

When there is disintegration of the social structure behind a large segment of the population, anxious mobs replace small predatory gangs. Stability can then be re-established only by getting a large part of the mob "settled down." Totalitarians settle many with machine guns. But if anybody is left to produce a material basis for the totalitarians, most of the mob must be fed, housed, and otherwise "rehabilitated" as producers. If democracy practices what it preaches, it offers everybody some avenue to security of life—not merely the security of the grave. Extreme individualism can produce social instability. The problem is always one of degree of individual liberty and social regulation.

Social Mobility as Individualizer

Social mobility in America is related to marked individualization. Weakened family ties and *mores* make it easy for individuals to cruise around geographically—and perhaps morally. The absence of rigid social classes eases movement from one social level to another. Personal competence and individual achievement thus can be quickly recognized. It is also possible for "social climbers" to thrive.

For one to gain wide recognition, he may have to regiment his life—vocationally and otherwise. Narrowing may result in eliminating recreational or other experiences which do not contribute directly to his objective. The base on which emotional stability rests thus becomes smaller—and demands which do not fit the narrow pattern cause emotional upsets. In a society with less social mobility and less drive for individual achievement, more emotional stability might exist. Perhaps social climbers streamline their acquaintances and experiences on a "cash flow" basis—with substantial flow of new personalities into and out of the climber's orbit. The narrowing effect is similar in regard to both lateral and vertical mobility—although goals may differ. The emphasis which psychiatrists and mental hygienists place on hobbies and recreation is significant in this connection.

Creativeness and Individualization

Creativeness is also important in the American drive for achievement—through mechanical invention, scientific research, industrial and economic organization, authorship, and other avenues. In recent years, schools have fostered creativeness in children, with wide theoretical acceptance of the idea that every individual is potentially creative. Recognizing that the skills and capacities of the people are the nation's greatest resource is related to emphasis on creativeness.

A creative person differs from others in that some idea or opportunity has occurred to him which has not occurred to the others. What occurs in the mind during the formation of a creative idea is not well understood psychologically. But extensive experience and alertness to possible ways of reorganizing the elements of that experience seem to be involved. Hence, creativeness seems to need a different attitude and level of attention from that demanded by routine or "drudgery." Habit may be adequate for routine.

A society which urges creativeness by a large percentage of its members is likely to be characterized by alertness and activity throughout the population. Great alertness by children may result in "over stimulation"—particularly if ambitious parents add dancing lessons and several other extra-school elements to a child's program. Some Europeans and Latin Americans seem to think that in the United States the whole population is over-stimulated. A continuously high level of stimulation develops nervous and emotional "tensions." Considerable emotional instability might therefore be expected—unless the people learn to avoid, relieve, or live with and "tolerate" tension.

"Progress" and Demands for Adjustment

Emphasis on "progress" further reflects the changing character of American life. Most Americans conceive of a democratic philosophy as including the idea that the future will be better than the past—that their descendants will have more of the "good things of life" than present adults have. The particular ways in which the future will be

better may be hazy—but not the idea that it can be better, and will be better, if intelligent effort is made toward that end.

The idea of "progress" is recent in human history. Although not all change represents progress—as judged by feasible criteria,—yet there could be no progress without change. When human life remained essentially unchanged for dozens of generations, whatever change did occur took place so slowly as scarcely to be observed by the unanalytical mind of primitive man. By contrast, many living Americans have personally seen marked change in such fields as transportation, housing, food preservation, recreation, employment, or warfare. When an individual life spans extensive change, it becomes normal to expect change. With considerable change, man can evaluate different areas of change and select those most to his liking. Close observation enables him to detect the factors which produce desired changes. He next learns to influence these factors. Progress then becomes more apparent—and more directly under his control. "Social planning" now reflects a small amount of such control.

Where the idea of progress is part of the cultural atmosphere in a populous and substantially unregimented society, one should expect varied practical orientations of the idea. Perhaps in America orientations range from passionately keeping up with the neighborhood Joneses regarding new gadgets to basic nuclear research for discovering new sources of power. How much lost motion one thinks there is in intermediate activities depends partly on his own sense of values. The "Jones" approach stimulates markets for mass-production items—with lowered prices and improved products. It also generates tensions in the race for material status.

Hence emphasis on progress, creativeness, social mobility, personal liberty, individual achievement, and similar aspects of our culture does much to speed the tempo of material enrichment, social change, and American life generally. But such emphasis also pulls the individual up from anchorage through the *mores* of a more slow-moving social order, without showing him how to achieve social and emotional stability in the fast-moving society. An emphasis on the individual which frees him from the inertia of the *mores* and stimulates him to creative achievement will likely speed the rate at which man explores and appropriates the material universe. But unless man at the same time learns to develop a psychological and emotional adjustment which is adequate for the speed-up in material change, a substantial proportion of the nation's potential resources in the form of a competent and productive population may be siphoned into mental hospitals through nervous disorders.

IMPLICATIONS FOR SCHOOLS AND EDUCATION

During the last quarter century there has been much discussion about "learning made easy," in contrast with the aspects of formal discipline which maintained that children should face some tasks which are difficult—largely because they are difficult. The respects in which the two concepts

seem antagonistic may have diverted attention from the respects in which they should be complementary.

Easy Versus Difficult Tasks, in Personality Growth

From the immediate practical standpoint there seems little point in emphasizing a difficult way of accomplishing a task when there is an easy way. Much advance in technological and material standard of living during the past few centuries has come about because man sought easier ways to deal with his problems. Few Americans would want to turn back the clock.

But we are told: "Into each life some rain must fall." Every person faces difficult problems. Along with "rain" is much fog and mugginess—drudgery and general disagreeableness which generate low-grade tensions and often erode personality. Imagination can reduce drudgery. But most young Americans will live adult lives which include drudgery and disagreeable routine—in housekeeping, factory work, and clerical positions, as well as in courtesy to friends and neighbors, paying rent and grocery bills, personal health and cleanliness, or other non-vocational aspects of life.

Under conditions of this type, the value of such traits as persistence, endurance, courage, patience, and resilience for repeated and varied attack becomes obvious. Such traits are not developed by easy tasks which demand little persistence, courage, *etc.* Some educators who theorize about developing the whole child refer to the curriculum as including *all* of the child's experiences or maintain that school is both life and preparation for life and overlook the fact that life includes difficulties, tribulations, and disappointments as well as satisfactions, joys, and successes. Much theoretical emphasis has rightly been placed on the need of each child to experience some socially approved success. Such experience gains the esteem of worthy peers, helps develop self-confidence, and otherwise aids in developing an adequate personality. Is it equally important that each child experience some disappointment and failure? Does one learn to recover from disappointment and learn to evaluate failure without experience at the task? If it is urged that for many children the non-school world supplies enough experience with disappointment and failure so that the school need not furnish additional experience in this sphere, it might be noted that for many children the non-school world likewise supplies extensive experience with success and enjoyment. If the school is eager to develop stable and resourceful personalities, should it be as much concerned about supplying each child with a judicious assortment of disappointments and problems that are too difficult for him as about supplying him with experience which he can readily gain success or enjoyment? If the adult is to ride at even keel through success and disappointment—or to react to success with modesty and accept disappointment with fresh resolve—guided childhood experience in both directions would seem valuable.

Social Promotions

Promotions by which children move from grade to grade with the age or social-maturity group with which they entered school, although they fall behind average members of that group in academic achievement, have been called administrative distortions of the "make-it-easy" philosophy. The question is whether academic achievement is the most important aspect of child development for schools to foster. A half century ago such achievement was the chief aim of school—along with keeping order. Many other child needs have since become school responsibilities. Several of these needs could be grouped under "citizenship"—with the question of whether academic or school-subject learning contributes more to good citizenship in present-day America than emotional stability, adjustment to group situations, vocational orientation, home and family life, or other areas to which schools are now expected to devote effort.

Social promotion should neither be recommended nor condemned as general practice—but as individual expedient. In theory, every school child should be at the grade level at which he learns most readily and achieves most nearly optimum general development. Physical size, age, intelligence, non-school interests and experience, family background, and numerous other factors affect such development. Hence careful determination of appropriate grade placement is now more complex than when placement rested wholly on knowledge of a few school subjects.

Perhaps the greatest problem regarding social promotion arises with transfers—to other teachers, other schools, or to college. However, if the elementary or secondary school to which a socially promoted child transfers makes its grade placements on the basis of optimum learning and adjustment, no particular problem should arise. If the receiving school frowns on social promotion, the transfer pupil is not likely to be worse off than if he failed of promotion one or more times in the school from which he came. In addition, for most schools those who transfer will be considerably fewer than those who remain, and the general policy governing the large group should not be determined by the small group. With respect to those who "transfer" to college upon graduation from high school, much could be accomplished through the use of objective achievement tests during the last part of the high-school career. Such tests could not only orient socially promoted high-school seniors concerning academic realities, but could also reveal to "A" students from weak high schools that they really do not know much—tell them that their schools have "kidded them along," if they are graduating with the idea that they have acquired a first-class education in subject matter. A well-conceived guidance program, in high school and in college, can do much to ease transfer problems.

Core, Subject Matter, and Simple Objective Tests

There has been much discussion of core or fusion of curriculum materials in contrast with greater separation of subject matter areas. The

problem involved is one of getting learners to see relationships among different developments—how geography affects economics or history, how chemistry and mechanical invention affect industrial organization and labor productivity, how corporate organization and bank discount rates affect available funds and price structures, how taxing methods and lobby forces may affect a health program, or how education can affect the attitudes or competence of a people and thus be an instrument for development and control. The important thing is that the learner recognize major relationships, not whether a history teacher, a chemistry teacher, or a fusion teacher guides his learning. So it becomes essentially a matter of breadth in understanding and capacity for illustrating and showing relationships which the teacher exercises, rather than a subject matter or other label attached to his title. The same applies to textbooks and related materials. Most present high-school textbooks are more readable, and better at showing the importance of concepts and facts, than the books of a generation ago. Present books are said to be more functional. Knowledge functions through relationships.

From the "relationship" standpoint much has been gained in recent years through improved teaching methods and instructional materials, but much may be lost through too great reliance on the simpler forms of objective tests. The overly popular true-false and similar "check-off" tests, which have become extensively used in high schools and colleges during the past two decades, offer little inducement for learners to organize and look for relationships among the varied learning materials to which they are exposed. Since it is primarily what the learner does that educates him, over-crowded classes and over-emphasis on simple instruments of "objective evaluation" can force school practice into emphasizing the less important aspects of learning—acquisition of facts, rather than their implications. Insofar as we now emphasize isolated facts, our schools may not be doing much better than they did a generation ago—except that more facts are available, to which youth with personal initiative might react.

School and Home, in Mental Health and Delinquency

There is increasing demand for schools to concern themselves about mental hygiene and emotional stability among children—and about juvenile delinquency. The demand becomes greater as it is more clearly recognized that many neuroses and other disturbances among adults begin during childhood, and that most of the nation's delinquents range in age from 10 to 17 years—with roughly a forty per cent increase of persons in this age group expected within five years.

Earlier paragraphs referred to possible relationships between emotional instability or delinquency and population mobility, drive toward competitive individualism, and emphasis on creativeness. Weakening of the home as a social and economic unit, with lessened capacity to offer needed stability in a complex society, is often mentioned as a cause of

neurosis and delinquency. The philosophy of "educating each child to the maximum of his capacities" might help increase neuroses or perhaps delinquency through a continuously high level of stimulation for personal accomplishment and an extensive array of new experiences which may be increasingly beyond the scope and perhaps the understanding of the home. Such a philosophy could be of great importance—should American educators or the public ever try to apply it comprehensively.

In considering mental health and emotional stability among children, questions arise concerning relationships between homes and schools. Educators, social workers, and others seem headed for disappointment if they assume that public schools are likely to revamp American homes—although some influence on homes may be expected. Social pressures for both parents to hold pay jobs, limited capacity of homes to provide for play or other adjustments among children of a particular age group, and decreasing competence of parents to guide youth regarding a complex vocational world or regarding civic problems of national or international importance are outgrowths of technical and social changes which cannot be reckoned with by railing at the "shortcomings" of the home—or by trying to make parents alone responsible for strengthening our moral fabric. These are problems which must be attacked on a broad community, national, or international basis. Since public schools have more extensive contact with children than any other community agency, these schools must increasingly assume responsibility for various maladjustments which originate with or confront children.

What can schools do regarding emotional adjustment of children, regardless of poor mental health in the home? One should recognize that parents may have different goals in mind for their children than teachers think desirable. Teachers or guidance workers often consider parental goals to be unrealistic. However, the haphazard advising which most high-school teachers do to some extent is probably an important influence, consciously or unconsciously, in the fact that the vocational choices of roughly three fourths of our high-school youth fall into occupational categories which actually accomodate about fifteen per cent of the employed population. The net effect of such advising by teachers, without information or perspective, is probably negative. With appropriate competence developed by counselors or other school personnel, much helpful vocational guidance could of course be provided by schools.

With respect to emotional adjustment, schools may have several advantages over homes—or be able to accomplish much in spite of poor mental health in the home. The child is under school jurisdiction for a large part of his most alert and active hours—especially where school bus transportation is important. The school offers more opportunity for association with others of a child's own age and sex—and in the long run, adjustment to peers may be more important than adjustment to parents. In addition, most secondary schools foster various club,

athletic, and other group interests—through teaching procedures within the curriculum and through co-curricular activities. If the school assumes responsibility for vocational orientation, it may also be the avenue through which the youth secures his first job—or learns the relationship of his job to an intricate economic system. Through holding a pay job, and retaining part or all of his earnings, he also experiences a growing economic independence from the home—which leads to other independence.

Along with the rich contribution which the philosophy of "learning by doing" has made to American education, it may have contributed to neglecting some of the less conspicuous or less extroverted aspects of learning and development. More could be made of the fact that listening or observing can be a dynamic process—as well as talking and acting, and that there are times when a higher level of imagination, discretion, and virtue is reflected by one keeping his mouth shut than by engaging in free conversation. At the conference table, in domestic or international affairs, much may depend on patience rather than on action, or on knowing when to be silent. And much might depend on the characteristics of the astute poker player—who can do a good on-the-spot job of reading personalities around the table.

Even as catharsis for pent up emotions, much can be said for listening, observing, and other forms of inconspicuous participation—as in regard to musical concerts, reading, movies, television, dance recitals, or educational filmstrips. Many schools recognize the value of drawing, modeling, wood-working, or dramatic and playground activities as avenues of catharsis—with insightful guidance from initial catharsis toward rapport and morale in group achievement. Sometimes "opening exercises" in schools contribute to the end noted. While emphasis on pupil activity in the learning process has done much to "loosen up" and motivate learning, since the days when children were to be "seen and not heard"—at home or in school—the more quiet and less extroverted types of learning and personality adjustment also need consideration.

"Order Is Heaven's First Law"

Although discipline is not advertised as much now as in the "school keeping" days of two generations ago, inability to keep order is a major shortcoming of beginning teachers. However, the shortcoming of concern at this point relates mainly to emotional stability and personality development in children.

Some fairly definite patterns or guides for behavior are essential if one learns to regulate commonplace behavior so he can devote active attention to the intricate aspects of life. In a complex society most persons should be able to meet many needs on the basis of routine and habit. Recurrence of situations and expectations is essential for establishing habit. Order and regulation make it possible for one to know what to expect of others and what is expected of him. Where chaos exists, sur-

vival is based on physical strength and jungle cunning. School can be a jungle for a child—with confusion and frustration as normal outgrowths, rather than a well-ordered environment—with routines and habits quickly established so his energies can be devoted largely to imaginative undertakings. Moreover, in group situations it is often necessary for an individual to accept some routines which restrict his own growth, but which are necessary for group well-being. Two possibilities thus arise. One is to accept gracefully the routines which seem inevitable, rather than consume time and energy in frustration because of them. The other is to produce suggestions for modifying or eliminating obnoxious and “deadening” routines.

The problem is one of balance—recognizing that constructive freedom for child growth is not synonymous with chaos, and that constructive discipline does not mean repression. Most experienced teachers know that a fruitful balance between discipline and freedom is continuously shifting—regarding different individuals, or the same individual in different situations. The ability of a teacher to recognize and maintain balance is important for emotional stability and achievement among children. Among adults, each person is largely responsible for recognizing and maintaining his own balance. The large number of admissions to hospitals for nervous and mental illness indicates that many people have not done well in carrying this responsibility.

HARMONIZING TWO AIMS, THROUGH MENTAL HEALTH AND GUIDANCE

An adequate philosophy of mental health and guidance means that harmony must be established between individual and group. Although our democratic social philosophy emphasizes the worth of the individual, with the state or other group existing for the welfare of the individual, this does not prevent the state from restricting individuals whose freedom injures others. Neither does concern for the values or worth of the individual prevent the state from forcing individuals to render service to the state. Taxation and compulsory military service are two apt illustrations. One need not look far to find evidence of neuroses associated with compulsory military service in this country during the past fifteen years. “Respect for the individual” and “compulsion by the state” are relative concepts—in the United States or elsewhere.

The problem then becomes one of how many neurotics and other mentally ill persons a society is willing to accept—so long as the group can pursue goals which dominant social elements consider important. The particular avenues through which neurotics are produced are secondary—whether compulsory military service, intense economic or other competitions, frustrations in home and family life which rigid social regulations perpetuate, or educational programs and practices which fail to help children develop emotional balance and gain personal satisfaction in life.

An earlier comment referred to dissatisfaction as a stimulus to improvement, and to rewards for individual contributions as a drive for achievement. Maximum adjustment might mean complacency and acceptance of the *status quo*—whereas pervading dissatisfaction and individual drive for reform might mean neurosis. Between these two lies the concept of optimum mental health. But with so little progress to date concerning optimum physical health, perhaps one should not be surprised that even theoretical progress regarding the more complex area of optimum mental health has been so small. Considerable progress has been made in teaching people to live with weak hearts or with the crippling effects of automobile accidents and polio. Can we learn to adjust as effectively with respect to cantankerous neighbors or kinfold, slave labor camps, personal worries, or morbid fears?

Perhaps many Americans could improve in learning to live resolutely with their troubles—particularly if there is accompanying effort to alleviate them. Although dissatisfaction with the *status quo* may stimulate effort at improvement, it can only furnish a motive—not a plan. Marked dissatisfaction might frustrate one and dissipate energies which could go into formulating a plan. While some outstanding contributions have been made by persons driven by competition and anxiety, others have been made by persons who seemed relaxed and leisurely. It was earlier noted that the psychology of creativeness is not sufficiently understood to be dogmatic on a point such as this.

But from the standpoint of social philosophy it is important to recognize that many neurotics are products of "the American way of life." Much of the fruits of technological progress could be lost through crippling mental illness. This point may have substantial importance as the percentage of older people in the population increases, and as we seek to extend their years of productive life—at the same time as we recognize the high incidence of mental illness among older persons. But regardless of age, more consideration of tension in relation to achievement may be in order. While we keep one eye on the output of industrial laboratories, perhaps we should keep the other eye on the intake of mental hospitals.

Physically Educating the Slow Learner

JOHN H. JENNY

IN SEVERAL states the only two required courses in the curriculum are English and physical education. It is not necessary to go into the educational philosophy nor the legal involvements of why these two. It is sufficient to note that educators and curriculum specialists see a need for experiences in these two areas regardless of the intelligent quotient of the child. I might add that the physical educator desires that all children come under the guidance of a teacher of motor activities regardless of the child's MQ. This presupposes that physical education not only be required but that it also satisfy a need. The general educator and classroom teacher are well aware of the characteristics of the slow learner with regards to abstract learning, but oftentimes they are not cognizant of the fact that the child has another quotient capable of being "exploited." Through the nurturing of the innate qualities of the motor quotient, the teacher can contribute greatly to the education of the slow learner through motor activities. It is this area of the learning process that will be investigated briefly and some activities listed through which a contribution can be made to the education of the slower learner.

Just as an IQ can be tested and measured so can the MQ. There are several batteries of items which might be used in the testing of the motor quotient, but if this test is to be valid, it must measure the innate capacities of the child and, as well, those variables which condition them. Regardless of the intelligent level of a child, each has a certain measurable level of leg speed, reflex or reaction time, coordination, and muscular viscosity. These innate physical or motor capacities are conditioned (unless the child has an orthopedic or sensory defect) only by the age, height, and weight of the child. McCloy¹ called his arbitrary method of determining an index for age, height, and weight a "Classification Index." By giving a general motor capacity test and dividing it by a norm based upon the Classification Index one may secure a motor quotient. This is comparable to the IQ in the mental field.

Slow Learner

If the slow learner is limited in the speed of learning in the abstract, he is more than likely to be limited in his motor learnings. He does, however, possess a more normal equipment for learning through motor

¹Aims and Methods in School Athletics, Wingate Memorial Lectures, 1932, page 400.

John H. Jenny is Supervisor of the Department of Physical Education in the Wilmington Public Schools, Wilmington, Delaware.

activities than he does through abstractions. Unless there is some orthopedic or sensory defect, he is more nearly normal in this respect since all possess to some degree arms and legs and a certain degree of reaction time and coordination. The slow learner thus has the where-withall to some degree for motor learning. It is in the pupil's capacity to learn through the physical that the physical educator can make his contribution to the learning of the "slower" child.

There are many learnings which come from motor activities. The graduates of fully accredited departments of physical education recognize the contributions which physical education can make to this motor learning as well as recognize the fact that learning needs not be confined to the secrets of the printed page. The illustration has often been used showing the relationship of physical education to abstract learnings by using a ball, and through the several processes of grasp or prehensile movement take this learning through the various phases until the mere mention of "ball" recalls its kinesthetic properties, its picture, its spelling, or a combination of these physical and word pictures. Recently another illustration of the contribution of motor learning came to the attention of the author when one of his former students told of a problem in a class in "arts and crafts." A slow learner was having difficulty in "weaving" paper strips through a cut "mat." All teachers in elementary schools as well as playground leaders have used these materials in activities. The little girl could not understand how to put the strips over and under, over and under. It could be "done" for her, but she couldn't do it alone. After recess, during which time the physical education teacher played "going in and out the window," the little girl came back to the "mat" and with a pleased look that would gladden the heart of all teachers of slow learners gleefully "wove" the mat. She told her teacher, "Why it's just like going in and out the windows." Yes, there are many contributions to the education of the slow learner through physical education.

The slow learner has the same needs for physical fitness and recreative skills as does the general population. It is in these areas that the specialty of physical education can make its greatest contribution. The physical educator is equipped to know what activities should be used at each developmental level for the muscle building necessary to keep the slow learner physically fit. Often the slow learner is retarded in grade level and is often thereby penalized by being given activities in physical education which are out of keeping with his muscular and visceral development needs. The slow learner may be slightly retarded in physical learnings that require a high degree of coordination and reaction time, but he still has the same muscles which need development for strength and visceral vitality for the normal daily body functions. The recent furor over the data released about the Kraus-Weber-Hirschland Tests and the accompanying condemnation of the American system for per-

mitting children to be less physically fit than their European counterparts has in it implications for the physical education of the slow learner as well as the more normal child.

The findings of Drs. Kraus and Weber were culled from the raw data secured from six tests given to children of elementary-school age. These six simple tests have to do with testing muscular efficiency of the upper back, lower back, leg strength, and body flexibility. All six tests are within the accomplishment (if they are physically fit) of the slow learner. The simple exercises which are designed to correct the weaknesses as found on the Kraus-Weber Battery may be given to the slow learner as well as the normal child. Here the slow learner is not only included in the homogeneous grouping of all the children with respects to curriculum content, but often is also able to accomplish better the exercises than the pupil with a higher IQ. The physical educator can thereby assist in giving status to a pupil who often is not a "star" in anything.

In addition to the contribution that the physical educator can make to the physical fitness of the slow learner, he may and should also contribute to the recreation education of this group. The leisure time of the general public has more than trebled in recent years. It is so with the slow learner, much of whose leisure will of necessity be spent in motor activities rather than in activities of an abstract nature. The trained physical educator and recreation specialist through a program of guided activities is able to contribute to the recreation education of the slow learner and better equip him for spending his leisure in worthy activities. Dance activities, music, crafts, and hobbies all provide curricular materials for this education as well as insurance for future protection of that leisure. Through such activities pupils of limited learning capacities in the abstract learn much through social contacts. Companionships are developed as inequalities of IQ are leveled by recreative activities of a social nature. Leisure which is not provided for by purposeful recreation education often becomes the matrix for developing anti-social tendencies in those whose slow learning capacities are not stimulated by the routine class activities of a book nature.

Camping and outdoor education provide a wealth of materials for the further education of the slow learner. In the vast laboratory of the out-of-doors, the teacher of physical education and recreational skills is able to capitalize upon the learning which comes from observing and doing. One of the skills which comes from learning in the out-of-doors is that of swimming. The slow learner can learn to swim. Swimming is just another form of locomotion. The arms and legs used in walking and running are the same means of locomotion needed in swimming. Not only is swimming a healthy recreational activity, but it is also one of the necessary means of survival. Annually, many youngsters drown who were not taught to swim. With the skill of swimming learned, the slow learner becomes a "safe" bet for all of out-door living. Many of the mysteries of

the printed page are an "open book" in the out-of-doors. Much of science including astronomy, biology, botany, ichthyology, and many of the other of science's many branches become illuminated and interesting in the "realschule" of the out-of-doors.

The physical educator can ably assist with the education of the slow learner. The success of his program is not to be measured in the usual goals of games won, *etc.*, but in the physical vigor developed, the recreative skills learned for later life use, and the learnings which have taken the place of the drabness of the printed page and its enigmas. Yes, the physical educator does have a responsibility for the education of the slow learner, and in carrying out that responsibility, a distinct contribution to make.

SOURCE MATERIAL FOR ASIA MONTH

How often have you searched vainly for a handy and concise source of information on life in Asia? A bibliography, perhaps, which included materials on religion, science, and arts in the East? As a starting point for filling this gap, a comprehensive booklet has been compiled which touches on many facets of Asian life. The bibliography includes listings of books, movie films, film slides, recordings, and mobile exhibits which bear on the cultural development of many of the Asian countries. The material was compiled by individuals and organizations interested in the promotion of *Asia Month*.

The idea for promoting a month-long campaign directed at stimulating an appreciation of cultural values in Asia grew out of the announcement of the theme of the Sixth National Conference of U. S. National Commission for UNESCO. The Conference, to be held in San Francisco from November 6 to 9, 1957, will focus its attention upon the possibilities for increasing understanding and cooperation between Asia and the United States. Upwards of 1,000 persons, including delegates from the 48 states and observers from many Asian countries, will convene in the Golden Gate City for what is expected to prove the most important meeting of this type to be conducted in the United States.

The notion for *Asia Month* was first put forward by individuals representing organizations such as the American Association of Museums, the American Council of Learned Societies, the American Library Association, the National Association of Secondary-School Principals, the Council on Library Resources, Inc., the Department of Audio-Visual Instruction, the Library of Congress, the Department of Classroom Teachers, the National Catholic Welfare Conference, the National Council of Jewish Women, and the National Federation of Business and Professional Women's Clubs. *Asia Month* activity will be geared primarily to community participation with local libraries and museums serving as focal points for any spontaneous or planned participation. The bibliography is on sale at the Government Printing Office, Washington 25, D. C. It catalogues some 200 books, 150 movie films and filmstrips, 30 different record listings, and a number of available visual exhibits.

Why a Shortage of Mathematics Teachers?

MILTON W. BECKMANN

A STUDY was conducted by the author to secure reliable fundamental data concerning the economic situation of mathematics teachers who had been graduates of the Teachers College, University of Nebraska, within the past seven years. The author was stimulated to do this study after he had read the final recommendations of Part IV of the White House Conference on Education Report, *How Can We Get Enough Good Teachers—and Keep Them?* It was recommended that local studies be made of the economic status of teachers. It also recommended that state and Federal studies be made relative to this problem. The U. S. Department of Health, Education, and Welfare also sent out literature recommending a study of the economic situation of the public school classroom teachers.

Our national economy has a vital and pressing need for teachers prepared to teach science and mathematics. The need for scientists and engineers is especially urgent in these critical times. A sufficient number of competent mathematics teachers in the classroom is our first line of defense. But what has happened? Our colleges and universities in the United States are preparing fifty-one per cent less mathematics teachers today than they did five years ago. The total number of graduates majoring in mathematics in the year 1954 and prepared to teach was 2,223. Of the 2,223 mathematics majors, only 59.0 per cent entered teaching. In other words, four per cent of every 10 members of the 1954 class who were qualified to become teachers of mathematics did not do so.¹ Other vocations are probably too lucrative. It is then exceedingly important that we retain those mathematics teachers we now have in our classrooms.

It has been my privilege to train teachers of mathematics in the Teachers College, University of Nebraska, for the past seven years. Within that time ninety-nine prospective teachers did student teaching in the University High School. A questionnaire with ten questions on it was sent to each of the ninety-nine graduates. In this article we shall be interested in the following two questions:

Milton W. Beckmann is Supervisor of Mathematics and Associate Professor of Secondary Education, University High School, Lincoln, Nebraska.

¹Eighth Annual National Teacher Supply and Demand Report, Research Division, National Education Association.

1. Have you taught since doing your student teaching? Yes.....; No..... If so, list all of your teaching and administrative experience chronologically.

**Position and Institution	Town and State	Years	Annual Salary	No. Teachers in System

****Indicate just what administrative or teaching position you held.**

2. In case you are no longer in education, will you fill in the following, indicating each type of experience you have had since that time:

Occupation or Position and Firm	Town and State	Date by Years	Annual Salary

Ninety of the ninety-nine questionnaires were returned. Out of ninety persons who were prepared to teach mathematics, forty-one are still in the teaching profession plus three persons doing graduate work in education. This is one person short of one half of those who prepared to teach and who are still in the teaching profession or plan to remain in it. Only thirty-one persons out of ninety are working in the classroom. Nine of the thirty-one classroom teachers are teaching outside of Nebraska. *We now have twenty-two of the original ninety who are teaching mathematics in a Nebraska classroom.* Nine persons are school administrators in Nebraska; two persons are school administrators in other states.

What happened to the other one half of the ninety persons prepared to teach mathematics? Four categories will account for thirty-one of them. Three persons listed themselves as housewives, two of them are doing graduate work (ministry and engineering), sixteen of them are in military service, ten of them are engineers. We have fifteen persons left. These fifteen will be listed later with their occupations.

How about salaries for the mathematics teacher in the classroom, the administrator, the person in military service, and the engineer? The three housewives and the two graduate students are not receiving salaries.

	<i>Classroom Teachers in Nebr.</i>	<i>Classroom Teachers in Other States</i>	<i>Administrators in Nebraska</i>	<i>Administrators in Other States</i>	<i>Military Service</i>	<i>Engineers</i>
Number of Persons	22	9	8	2	16*	10
Average Annual Salary	\$3719.31	\$4010.88	\$4825.00	\$4550.00	\$4117.77	\$6890.00

*Two persons did not indicate salary; therefore, they are not included in the average annual salary.

The average annual salary for the classroom mathematics teachers out-of-state is \$291.57 higher than for the classroom mathematics teachers in Nebraska. Those mathematics teachers who decided to go into administration in Nebraska found the annual financial remuneration to be, on the average, \$1105.69 better than the classroom teacher in the same state. Two persons leaving the Nebraska classroom to go into administration are getting, on the average, \$830.69 more than the Nebraska classroom mathematics teachers. The persons in military service find it more profitable, on the average, to the monetary tune of \$398.46. Will those persons in service when honorably discharged decide to work in the Nebraska classroom for \$398.46 less money?

In Table I, observe the engineers' average salary. There is a differential of \$3170.69 over that of the classroom mathematics teachers in Nebraska. We are up against the fact that the qualities that made an individual a good mathematics teacher are the very characteristics that are at a premium in the contemporary American economy with its emphasis upon technology.

TABLE II. MATHEMATICS TEACHERS WHO TOOK ENGINEERING POSITIONS

<i>Person</i>	<i>Salary</i>	<i>Title and Company*</i>
A	\$ 7,000	Project Engineer, Turbo-jet Controls, G. M. C.
B	5,500	Supervisor of small groups of analysts in data reduction.
C	7,800	Chief Chemist, Company.
D	12,000	Plant Layout Engineer, Company.
E	6,700	Engineering Designer, Company.
F	5,700	Field Engineer,
G	7,000	Supervisor of Building.
H	4,500	Assistant Engineer Aircraft Company.
I	5,200	Chemist,
J	7,500	Engineer with Inc.

Average \$6890

*Name of company deliberately deleted so individual cannot be identified.

An account for fifteen persons has not been given. Since one may be a seismologist, another a salesman and so on, these fifteen persons were listed in a category under the heading of "Miscellaneous."

TABLE III. MISCELLANEOUS

<i>Person</i>	<i>Salary</i>	<i>Title and Company*</i>
A	\$ 5,000	Salesman,..... Book Company.
B	7,200	Detailman for....., a pharmaceutical house.
C	5,376	Assistant Seismologist for..... Oil Company.
D	3,600	Instructor, University of.....
E	5,825	Statistician, United States Public Health Service.
F	4,200	Standard Checker for....., meat packing company.
G	5,000	Business Manager of weekly newspaper.
H	5,400	Seismograph Computer for....., Inc.
I	6,500	Operator and Owner of a restaurant.
J	5,500	Director, Office of Tests,..... University.
K	4,000	Office Manager,..... Company.
L	2,640	Secretary.....
M	6,500	Supervisor,..... Insurance Company.
N	7,600	Insurance Agent,..... Insurance Company.
O	6,000	Statistician,..... Company.
Average \$5222.27		

*Name of company deliberately deleted so individual cannot be identified.

Those persons listed under "Miscellaneous" are getting an average salary of \$5222.27. The differential between this group and the mathematics teachers in the Nebraska high schools is \$1502.96. Three persons in this group of fifteen are getting less than the mathematics instructor. One is an instructor at a university, one is a business manager of a weekly newspaper, and one is a secretary.

A recommendation for each graduate is kept in a file. The prospective teacher has also received a grade for student teaching. Let us categorize the ninety persons in this study into superior, good, fair, and poor according to his recommendation at the end of his student teaching and the grade he received. One would discover that those who remained in teaching are pretty evenly distributed into these four categories. One would further observe that this held true for those persons listed under "Engineering Positions" or under "Miscellaneous." In other words not all of those or even a high percentage of those who received the best grades or recommendations remained in the teaching profession, or went into engineering or are listed under "Miscellaneous." The distribution is quite uniform.

It is quite evident, I believe, why only twenty-two out of ninety persons continued teaching mathematics. We should be proud, that with the large differential in salary between vocations, one half of them remained in the teaching profession. These people are to be congratulated.

Let us teach because we love to teach, but let us face the facts. It appears to this writer that the financial aspect of the matter is pretty important after all. In a study of the cravings of the average human being, it was found that he wants food, shelter, clothing, music, books, and travel. All right, money will buy all of them. To be anxious to get ahead financially is laudable. The teacher's anxiety in this respect is no different than others. The idea of gain, the idea that each man not only may but also should constantly strive to better his material lot is an idea which is no longer foreign to people in American culture. It is as modern an invention as printing. It looks as though we, when employing teachers, still adhere to the philosophy of our Pilgrim forefathers. In their day the idea that gain might be a tolerable or even a useful goal in life was nothing short of a doctrine of the devil.

Salaries provided for teachers should be established at actual competitive levels. The college graduate in June will get, on the average, in all fields an annual salary of \$4,800. The engineer, on the average, may expect an annual salary of \$5,196.² The beginning mathematics teacher in Nebraska, on the average, may expect an annual salary of \$3,700.00. The shortage of mathematics teachers has reached the point where determined, and even desperate, remedies must be applied if the country's technological superiority isn't to be seriously endangered. No citizen, no man or woman, can afford to let this catastrophe happen. The time for action is now . . . work through your Parent-Teacher Association . . . call on your school board members . . . contact your superintendent of schools. Help meet this threat. The idea of holding and getting better mathematics teachers by paying them more money is not utopian; on the contrary, it is as certain as a proposition in Euclid.

²These anticipated salaries were taken from a study made by the Placement Service, Northwestern University.

THE TYPICAL TEACHER

The typical man teacher devoted 11.3 hours a week to school duties in addition to the regular school day, according to a recent report on a National Education Association survey. He has 129 pupils in his classes. Forty-two per cent of the male teachers have a master's or higher degree. Only 34 per cent of the women teachers are unmarried. More than 80 per cent of the women teachers reported that, if they could start over, they would again choose to teach.

Recommended Policies and Practices for Student Council Leaders for Safety Education

THERE is inherent in youth a vast unexplored potential for constructive action for safety education. Within the past twenty years the student council as a co-curricular school group has become increasingly important because of its rapid growth, its acceptance among educators, and its capacity for effective action. It seems possible that in the student council may be found the means of lending support to constructive activities. One of these can be a more effective program of safety education. The laboratory through which safety education activities for youth may be channeled might well be the student council.

In a recent survey made by the National Association of Student Councils, it was discovered that more than two thirds of the high schools of the country have some form of student participation in school administration through a student organization generally called the student council. There are more than fifty state student council associations throughout the United States. The National Association of Student Councils now has more than 7,600 member schools. These councils concern themselves with school and community problems under the guidance of, and in close relationship to, school administrators and teachers. The student council provides a natural avenue by which interest and activities concerned with safety education can be stimulated.

Wherever a student council exists there is an opportunity for young people to work on the vital problems connected with safety education. A successful student council always fosters worth-while activities some of which should be on one or more areas of safety education.

The NEA National Commission on Safety Education and the National Association of Secondary-School Principals believe that there are significant contributions to be made by youth in the field of safety education. Contributions can be made most effectively through an already-existing school organization under the guidance and supervision of educators. Therefore, since the organizational framework of the student council is already established and since it is the only student organization which represents the entire student body of a school, successful safety education programs can be stimulated cooperatively by the Commission, the state

This article was prepared by the staff of the National Commission on Safety Education of the National Education Association, 1201-16th Street, N. W., Washington, D. C.

student council associations, and the National Association of Student Councils.

With these thoughts in mind, representatives of the Commission met with the Advisory Committee of the National Association of Student Councils in Toledo, Ohio, during June 1956. By unanimous action, the Advisory Committee recommended the adoption of safety education as a continuing program for planning and action by the National Association of Student Councils in cooperation with the NEA National Commission on Safety Education. In addition, a recommendation was made to executive secretaries of the various state student council associations that they in turn adopt safety education as a continuing program. This recommendation was presented to twenty-five state student council executive secretaries and was accepted unanimously by them.

In further discussions with the state executive secretaries, it was suggested that the National Commission on Safety Education provide an opportunity for representatives of student council associations and specialists in the field of safety education to meet and formulate appropriate objectives and/or criteria for a safety education program. This group also felt that a broad, flexible program might be developed in a meeting of this kind.

Safety education cannot be a packaged program nor should it be the single consuming theme of all student council activity. Rather, it should be appropriately included at those points in the total student council program where its application and utilization are consistent with the general aims of the student council.

Accordingly, on September 28-30, 1956, the Commission and the National Association of Student Councils sponsored the Workshop for Student Council Leaders for Safety Education in Washington, D. C. Twenty-four state association student officers and executive secretaries representing fifteen states considered (1) objectives or criteria for a safety education program through the student council organization, and (2) the various aspects of developing effective safety education programs. At this same time, a Conference of Driver and Safety Education Association Leaders was in progress in Washington with representatives of thirty-two associations attending. During one morning, both groups met in joint session to consider the general areas of safety education in which it would be profitable for state driver and safety education associations and state student council associations to cooperate in the encouragement of a worth-while safety education program for youth.

The Workshop for Student Council Leaders for Safety Education endeavored to point out general needs and to recommend policies and practices to guide state student council associations, as well as student councils of individual schools, in the development of safety education programs for youth through the existing student council organization. This report reflects the actions taken by the Workshop and also refinements suggested by individual participants. It is hoped that these

recommendations will serve to challenge and guide those who are responsible for the formulation of student council programs in the interests of safety education and constructive activities for youth.

SUGGESTED PROGRAM OF SAFETY EDUCATION FOR STUDENT COUNCILS

General and Specific Purposes

The student council encourages students to become interested in civic and social matters and to take significant steps to alleviate undesirable situations or to suggest ways and means of improvement. The main purpose of the student council is to teach good citizenship. Thus, the student council becomes, in reality, a laboratory of citizenship. It teaches young people to be good citizens by doing the things which a good citizen does.

The program recommended herein is not a distinctly new one, but rather has as its purpose to provide encouragement and assistance to student council safety education projects already underway and to coordinate and channel properly worthy youth safety education projects being sponsored by many non-school groups. The program is also intended to stimulate interest and activity in schools which presently are doing little or nothing in this area.

A basic purpose of a safety education program through the student council would be to contribute to the general aim of the council. More specifically, a student council program should develop among high-school youth a strong sense of personal and social responsibility for the common welfare through active participation in safety education programs. This purpose involves:

1. Stimulation of state student council associations and local councils to accept the responsibility for an effective youth safety education program
2. Establishment of a means whereby student councils may work cooperatively in a concerted effort to provide more opportunities for safe living among youth
3. Provision for resources needed by state associations of student councils and local student councils participating in the program
4. Assistance in the preparation of leaders to carry on an effective safety education program
5. Suggestion of standards for initiating state and local student council programs
6. Provision for means for continuous program improvement through constant appraisal and evaluation at the national, state, and local levels.

Principals for Program Planning

Planning for a program of safety education through the student council should be based on the purposes outlined above and on other practical objectives. In determining details, state and local groups should consider the special problems of the state or community, the number and needs of youth, problems which young people face, available resources and materials, and the environment in which the program is to be carried on. Specific details of the program should be formulated in terms of the

needs of the state, community, and school and should be determined by cooperative planning between youth and educators.

Regardless of the level (national, state, or local) at which planning for a safety education program through the student council takes place, there are some principles which should guide program formulation. A safety education program through the student council should:

1. Contribute to the general objective of education.
2. Contribute to and be compatible with the basic aims of the student council.
3. Originate in the vital problems of youth
4. Recognize the need for flexibility to insure the practical application of a continuing effort
5. Emphasize positive rather than negative activities
6. Involve those individuals and groups within the school-community who have special interests and obligations in safety education
7. Provide the school-centered framework which would encourage only appropriate contributions from non-school groups interested in school safety education.
8. Discourage flagrant commercialism and activities of doubtful educational value
9. Involve all students of the school in surveying the need for such a program locally and in determining objectives.

Organization and Administration

Individuals and groups who have the responsibility of furnishing effective leadership for organizing and administering safety education programs through the student council will need some rather definite organizational guides to achieve unity of effort. Also, as with other educational programs, those responsible for the program at the various levels should be continuously aware of procedures to be encouraged and those to be discouraged. This section deals with recommended policies and practices for the organization and administration of safety education through the student council.

National Level—It is suggested that a representative committee be appointed to guide the program. The committee might include state student council association officers and executive secretaries, and representatives of the NEA National Commission on Safety Education, the National Association of Student Councils, and state driver and safety education associations.

The primary duty of the committee would be to determine policies and activities for a national-level safety education program for youth using the aims and objectives developed by the Workshop as their standard and guide. Additional responsibilities would be (1) to suggest appropriate projects and activities, (2) to suggest ways and means of program improvement, (3) to suggest the development of materials to be used at the state and local levels, and (4) to evaluate the over-all program.

Various materials and services should be made available to state student council associations from the NEA National Commission on Safety Edu-

cation and the National Association of Student Councils. The specific services proposed were:

1. To prepare and distribute such safety education materials as: (a) a guide for organizing a safety education program at state and local levels; (b) suggestions about films for use with student groups; (c) safety tips, illustrations, skits, and editorials for use by school newspapers; (d) a suggested "Safety Week" program
2. To suggest projects and activities
3. To encourage student councils to assume leadership in safety education, while maintaining an open mind regarding assistance offered by non-school groups
4. To encourage active participation of those people on national, state, and local levels who can contribute to the safety education program
5. To suggest technics for evaluation of the total program at the national, state, and local levels
6. To provide an exchange of materials and ideas involving: (a) collection of materials and reports of successful practices from state student council executive secretaries and other sources; (b) distribution of these materials to state executive secretaries; (c) provision of information concerning sources for usable safety education materials available from professional and non-school groups.
7. To arrange conferences and leadership workshops
8. To provide and/or suggest resource people for conferences, workshops, and other professional gatherings
9. To seek ways of obtaining suitable recognition for meritorious effort
10. To relate the student council safety education program to other safety education programs at the national level
11. To encourage state student council associations in the coordination of their safety education programs.

State Level—At the state level, it is recommended that a committee on safety education under the guidance of the state student council executive secretary be formed. It is suggested that the state association designate a student officer to serve as co-chairman of the committee. The student vice president is specifically suggested as a possibility. Administrators, teachers, and students should be represented on the committee. Coordination of effort should be established and maintained among the committee, the state department of education, the state driver or safety education teachers' association, and other appropriate educational groups within the state.

Specific duties of this committee would be to advise and guide a safety education program for youth by: (1) arranging for safety education emphasis in state, regional, district, and county student council conferences and workshops; (2) making selected materials available for local council use; (3) coordinating the efforts of non-school groups interested in safety education; and (4) providing an exchange of ideas and materials among local councils.

The services of non-school groups such as automobile clubs, safety councils, civic clubs, *etc.* may be utilized wherever and whenever it is felt that an educationally significant contribution can be made to the program. It is emphasized, however, that the basic program pattern

should originate and be carried on within the framework of education and under the guidance of educators.

Local Level—In recognition of a growing need for a continuing safety education program, the Workshop recommends that student councils adopt a safety education program as one of their major projects. To implement this recommendation, it is suggested that a standing committee on safety education be formed and that the chairman of the committee be a student council officer or member. Members of the committee should be drawn from as many groups (faculty, administration, and student) interested in safety education as possible within the school community so as to achieve representative involvement. Where possible, the driver education teacher or safety education teacher should be a member of the committee, as one of the faculty suggested above, or serve as a consultant to the committee.

The school committee should be responsible for initiating and carrying on a continuing program of safety education within the framework of the school's educational program. It is felt that local programs should be planned in terms of the needs of the school and community and should be designed to make use of available community resources. An educationally sound program is the basis for good public support, and, by the same token, appropriate public support would be essential to a sound educational program.

Local student council committees should use appropriate materials which have already been developed, and they should make a particular effort to develop materials which would be pertinent to the needs of their own school and community.

It should also be the responsibility of the local committee to develop within the school and community an appreciation of the values to be derived from an effective safety education program. To assure continued effectiveness, the program must depend in large measure upon its being continuously interpreted to the school and community. The inherent public relations potentialities of such a program might also serve as a means of increasing public interest in the total education program. To achieve this end, all available media for disseminating information about the program should be used. Cooperation should be engaged from the press, radio, television, other advertising media, safety interest groups, public and private agencies, and parent-teacher associations.

Certainly, credit should be given to individuals and groups for assistance rendered to the program. However, all publicity should reflect the true nature of the safety education program as a school program to which supporting organizations contribute on a cooperative basis.

Local agencies of many different types can and will assist in school safety education programs. These groups might provide appropriate printed materials, services of resource persons, useful information and data, equipment, and facilities. The committee should assume respon-

sibility for keeping these agencies informed of the program and for coordinating their varied contributions for greatest effectiveness. A definite plan should be developed and carried on to utilize effectively the facilities and personnel resources of these groups.

Evaluation

Provision should be made for evaluating the extent to which program objectives are being achieved. Evaluation should be carried on from day to day and on a long-range basis. Obviously, the first requirement is that the program have clearly stated objectives compatible with accepted educational philosophy. The program should have sound administrative policies supplemented by detailed procedures to assure that general practice is in keeping with acceptable standards. The policies and practices recommended in this report may serve as a checklist to assist in evaluating the objectives and administrative policies of national, state, and local programs.

Evaluation of the safety education program should be done on a day-to-day basis by the student council, and on a long-range basis by the administration, faculty, parents, and pupils. It is recommended that the student council conduct frequent surveys of the school situation and evaluations of present activities to allow for adaptation of the safety education program to the changes in the life of the community. Evaluation should be made in terms of student growth rather than merely recounting activities and projects. Use should be made of all available evaluation procedures, both objective and subjective. The local committee might make use of checklists, questionnaires, written reports, and other devices to effect evaluation.

These types of evaluation should be carried over into the programs at the state and national level through a system of reporting from local councils to state associations and from state associations to the national association. Reports by local councils should be submitted to the state safety education committee which would in turn use them as a basis for evaluating the total state effort. State reports should be forwarded to the national committee for evaluation of the national effort.

DO I HAVE ENGINEERING APTITUDE?

This is the title of a set of questions, answers, and interpretations of answers for use in self-analysis by young men 16 to 25 years of age to make a check on engineering and scientific aptitude. Its author is Dr. A. Pemberton Johnson of the Testing and Guidance Division of the Newark College of Engineering, and former Project Director for engineering tests at the Educational Testing Service, Princeton, New Jersey. It is distributed free of charge by the New Jersey Engineers Committee for Student Guidance. Requests should be addressed to: Dr. Frederick A. Russell, Meetings Secretary, Newark College of Engineering, 367 High Street, Newark 2, New Jersey.

High School—College Nights

COMBINED committees representing the Pennsylvania Branch of the National Association of Secondary-School Principals and the Pennsylvania Association of Colleges and Universities have been meeting regularly to discuss areas of mutual concern and to make recommendations. A major problem reviewed was that of the school and college night. This topic was given first consideration because of the need for a uniform approach, and because it lent itself to immediate solution. The following recommendations reveal the results of the past discussions.

Secondary schools and colleges of Pennsylvania recognize their mutual responsibilities in offering proper guidance to high-school students who are interested in gaining admission to some institution of higher learning. It is the studied opinion of educators that guidance and not recruitment is the principal objective of high school-college relations. Guidance of the student normally begins in the earlier years of secondary education and the college officers of admission are invited only to supplement the earlier guidance by supplying specific information about their particular schools.

A successful program of cooperation between schools and colleges is developed upon the foundation of initial guidance conferences involving the parent, the teacher, the student, and guidance personnel. The beginning of this guidance process should be effected at the junior high-school level. Out of this relationship comes an understanding of the basic problems which confront a student in selecting a proper curriculum, evaluating vocational interests, and possible post-high-school plans.

This program would continue with:

1. Conferences between the high-school counselors and college representatives. It is suggested that such conferences be held from 6-7 P.M. on the evenings of school and college nights.
2. Visits by the principals and guidance counselors to the college.
3. Regularly scheduled visits of college representatives with previously oriented students.
4. Visits by the parents and students to the campus whenever possible.

These and similar methods might be considered by the high schools in determining which approach to the guidance problem is best suited to their needs. One of the methods which has been used in recent years to provide assistance to the student is the college-school night. These conferences have varied a great deal, but experience has indicated that those programs which were most successful included the following important elements:

1. College Nights are a part of the high-school guidance program, and should not be considered a substitute for it. Considerable student preparation should precede these programs. Preliminary sessions with the students concerned should be held by the school counselor.
2. There should be a determination in advance as to which colleges held interest for the students.
3. The invitation to the college should be sent prior to the end of the spring term and should contain a statement of the nature of the occasion. The furnishing of a list of the names of the students previous to the meeting is considered good practice.
4. The preliminary assembly should be brief and its purpose should be to provide necessary announcements and instructions concerning the program. Local conditions may warrant the use of a public address system in lieu of an assembly.
5. All interested students in grades 9, 10, 11, and 12, and their parents, should be encouraged to attend College Nights.
6. It is strongly recommended that high schools in a natural geographic area combine to conduct a College Night.
7. Planning of the group conference feature of the program is essential. The following suggestions reflect good practice:
 - (a) The presence of a faculty or student committee to greet the college representatives, to supply programs and information, and to direct or conduct them to their rooms is a desirable introductory service. The assignment to each conference room of a faculty or student representative, who introduces the college representative to those in attendance, lends an appropriate dignity and orderliness to the occasion. These hosts can render an additional service by attending to the registration of the students.
 - (b) The assignment of separate rooms of sizes proportionate to the indicated attendance is important. The use of booths in one large area, such as a gymnasium, is highly undesirable.
 - (c) Announcements over a public address system during the conference period should be avoided. From five to ten minutes should be allowed between sessions, the opening and closing of which can be designated by the sound of a buzzer or a bell. The scheduling of one continuous conference session is not desirable, because of the disturbance caused by the movement of students into and out of the room.
 - (d) With a view to integrating the College Night program with the schools counseling service, the topics discussed during the conferences should be reviewed in subsequent guidance sessions in the high schools. Students in need of additional information should be encouraged to write for it, or if convenient,

arrange for a personal interview at the college. Having met the college representative, they will be addressing their requests to an acquaintance, rather than to an institution.

8. The representatives of the colleges are urged to observe the following recommendations:
 - (a) The representative should recognize the fact that his primary function is to assist the high school in the guidance of its college-bound students.
 - (b) Colleges should be represented by an officer of the institution who is fully qualified to render the required service.
 - (c) The use of posters and placards should be confined to the representative's room. The representative should clear with the host school in the use of all audio-visual aids.

In order to implement the scheduling of high school-college nights a clearing house has been set up in each of the nine convention districts. The responsible officer for college-school nights in each secondary school is strongly urged to clear his date with the appropriate clearing house officer in each district. It is extremely important that this be done, so that college-school nights will be on a uniform basis throughout the state. The avoidance of conflicting dates will make it possible for the college to be properly represented.

TOURS TO WASHINGTON BY STUDENTS ARE THEY EDUCATIVE?

Is there enough "education" in those high school senior education tours of Washington? The U. S. Office of Education is trying to determine the answer to that question. It plans to use this summer's student tours as a laboratory, observing itineraries and planned programs by students and their teachers. "Some of the student tours to the nation's capital have become little more than sightseeing junkets," says a USOE spokesman. The Federal agency is interested in finding ways of impressing the young visitors to Washington with the fact that "what happens in the capital has a direct bearing on their lives back home." In addition to observing the tours, USOE's researchers consulted educators on their own experiences with student visits to Washington.

The new research project stems from the fact that organized student visits to Washington in recent years have become tremendously popular. Busloads of students from all over the nation have become as familiar a sight in Washington as the famed monuments they visit. And USOE is concerned that some of the student visits, through no fault of their own, get not much further than visits to those monuments. The results of its study will probably be published in the form of a program guide to student tours of Washington.

Scholarship Awards to Seniors

LORAN L. SHEELEY

MIAMI Jackson High School has been in the process of preparing for an evaluation this fall. One problem that has caused much discussion has been the activity program. In trying to analyze why this has become a problem, it has been found that in the annual Senior Awards assemblies nearly all awards are in direct relationship to the many activities offered by the school. Scholarship is the least—the focus is on service and activity. Since tradition has built up all the athletic and activity awards, students on entering Jackson have pointed their course toward winning one of these many awards. In trying to reward students for good deeds, *etc.*, the school has focused the limelight on activities. Last year, for the first time, students competed with all the other awards and a certificate of scholarship was given to all who in five semesters (10th grade, 11th grade, and 1st semester 12th grade had earned a 3.0 or better (B) average in their subjects. This average is based on A-4; B-3; C-2; D-1; F-0; with no physical education grade counted. Last year out of 450 graduates, 67 earned this award. The certificate states the name of the student and that he has ranked.....in the 1957 class of 450 seniors—in this case 1 to 67.

In addition to the certificate, we took the top ten per cent which was 45 and divided it 23 and 22. Students ranking from 1 through 23 received a gold key honor award. Students 24 through 45 received a silver key honor award. On the face of the certificate is written "Gold Key" or "Silver Key" of the top 45. On the back of the key are the initials of the student, the year, and his rank and class number. As an example, the fifth ranked senior received a certificate stating this fact. On the certificate was written "Gold Key," 1957 and 5-450. The 5-450 means he was the fifth in a class of 450. The student has a certificate as proof of this Key. Consider a senior ranked 25. He received a Silver Key with his initials, 1957, and 25-450 on the back.

We feel that this method of awarding top students an honor will, in time, tend to focus attention on rank in the senior class. Since this was the first year, we are now planning to prevent abuses that may arise in the future, such as picking courses that are easy or dropping courses when the teacher demands that the student produce.

The cost of this program is not too great—for our graduating class of 450 it is approximately one hundred dollars. The Allapattah Lions Club of Miami has agreed to pay the cost of the awards because they feel scholarship should be recognized in the local high school.

Loran L. Sheeley is Principal of the Miami Jackson High School in Miami, Florida.

The Book Column

Professional Books

ANDERSON, J. M. *Industrial Recreation: A Guide to Its Organization and Administration*. New York 36: McGraw-Hill Book Company, Inc. 1955. 304 pp. \$5. In this outstanding work the author presents the first complete book on the subject of industrial recreation. Part I deals with principles, Part II with the program, and Part III with the administration of industrial recreation. The material is designed as a textbook for courses dealing with the organization and administration of industrial recreation. It also serves as a practical guide for company recreation directors or other interested personnel.

This book is the first to relate the employee recreation program to the various social problems which industry and society as a whole are facing today. The recommended methods and techniques have been selected after careful analysis of modern industrial problems. Also stressed are the relationships of the employee recreation program to the total community program. Most of the recommendations are documented.

The author covers all significant advances since the earliest beginnings of the industrial recreation movement in the United States. Particularly noteworthy is the inclusion of the personnel standards for leadership positions in industrial recreation, endorsed by the Board of Directors of the National Industrial Recreation Association at the Association's annual conference in Cleveland in 1953. In addition, the most recent research findings pertaining to the organization and administration of industrial recreation are included.

Chapter headings are: What Is Industrial Recreation?; Benefits of Employee Recreation; The Growth and Development of Industrial Recreation in the United States; Recommended Principles and Policies; Planning and Initiating the Program; Program Activities; Leadership; Organization and Administration of the Employees' Recreation Association; Financing Industrial Recreation; Important Factors in Administration; The Intercompany Industrial Recreation Association; Evaluating Industrial Recreation.

BLAIR, G. M. *Diagnostic and Remedial Teaching*. New York 11: The Macmillan Company. 1956. 425 pp. \$5. This book has been written in an effort to supply teachers, principals, supervisors, and superintendents with concrete and practical suggestions for carrying out remedial programs in their schools. It is a guide which should be particularly useful to teachers in service at the elementary and secondary school levels who need specialized instruction in dealing with children with disabilities in the fundamental processes of learning. The book has also been designed for use as a basic text in courses in diagnostic and remedial teaching which are offered in teacher-training institutions.

Part I deals with the problem of improving reading; Part 2 is concerned with remedial work in the areas of arithmetic, spelling, handwriting, and English fundamentals; and Part 3 is devoted to such general matters as how to make a case study and how to prepare for remedial teaching.

BURNETT, R. W. *Teaching Science in the Secondary School*. New York 16: Rinehart and Company, Inc. 1957. 394 pp. \$5.25. The aim of this book is to present the theory and practice of science teaching on the secondary school level in an integrated fashion in order to help to develop both the theoretical insight and the practical knowledge and skill needed for high achievement in science teaching.

Part I presents the basic problems that must be faced and solved by the teacher if science teaching is to be made effective. These problems are by no means theoretical—they are real and urgent today. Chapter 2 of Part I compares two general methods of science teaching in terms of some of these problems and such goals as the development of critical reflective thought and the acquisition of durable knowledge. This chapter should provide an understanding of the bases of growing criticisms of conventional science teaching. It should also provide a basis for understanding the significance of the considerable body of research which is explored and annotated in later sections of the book—research which supports a notable trend toward a modification of the standard instructional procedures of the past.

Part II is largely devoted to an analysis of the critical problems of science teaching specified in Part I. The contributions of research, experience, and modern psychological theory toward a solution of these problems are presented. Since a great deal of modern practice was inherited from the past, a chapter is devoted to a careful resumé of the history of science teaching in the United States. But the major emphasis of Part II is on the application of theory and research to the practical problems of classroom instruction. Chapters on classroom management, the laboratory, audiovisual aids, and evaluation, for example, are designed to illustrate the consistent application of modern theory and research to classroom problems and operations.

Part III consists mainly of separate articles written by experienced teachers. They illustrate the final application to practical classroom operations of some aspects of the theories presented in earlier parts of the book. In short, these chapters represent not what professional educators or teachers think should be done, but what good teachers are doing today. Part IV, a single chapter, looks more broadly at the status of the profession of science teaching. It is designed to give the reader some understanding of the problems faced by the profession as a whole toward the end that he might join his colleagues in continual self-improvement and in organized effort to improve the profession.

CLEARY, F. D. *Blueprints for Better Reading*. New York 52: H. W. Wilson Company. 1957. 216 pp. \$3. This book provides new and tested answers for old questions like: "How can children be helped to acquire reading interests?" "How can they be encouraged to develop the spirit of inquiry and the habit of fact finding?" "How can books be used to teach attitudes and values?" Teachers, librarians, and administrators will especially want to review the author's criteria for evaluating reading and learning materials; also her list of factors which influence the reading young people actually do. For beginner and professional alike there is an outline of suggested guidance programs. The gist of the book is summed up in a series of 11 charts. These set out (1) learning objectives for children, and (2) corresponding "action recommendations" for teachers and librarians.

College Admissions 4, The Student from School to College. New York 27: College Entrance Examination Board, 425 West 117 Street. 1957. 128 pp. \$3.

This is a collection of 15 articles, each by an authority with a firsthand, working knowledge of his subject. It is the first in the Board's college admissions series to deal primarily with evaluating and assisting the individual student. Two college presidents introduce the volume with considerations of basic college policy in the years of heavy admissions pressures ahead, Robert W. McEwen of Hamilton College arguing "The case for selective admissions" and Albert N. Jorgensen of The University of Connecticut discussing "College for everyone?" Four of the book's seven articles on evaluating the student, concern theoretical and practical aspects of the assessment of personality and character in admissions. Remaining articles in the section discuss the interpretation by college admissions officers of the student's marks, rank in class, and test scores.

In the section on helping the student, the authors discuss how college admissions officers and school counselors might more effectively guide the college-bound student, the school's guidance program, the role of the college counselor and of the college itself in the student's personal adjustment to college, and the awarding of the scholarship aid. A special section presents the actual admission data on ten boys and ten girls. Readers may compare their own admissions decisions on these 20 applicants with reports on how each student actually fared in college and with the admissions selections made by the 66 college admissions and 30 secondary school officers who were the participants in the Fourth Colloquium on College Admissions.

FOSTER, C. R. *Guidance for Today's Schools*. Boston 17: Ginn and Company. 1957. 376 pp. \$5. This book has been written to help teachers-in-training and those in service to understand and to utilize the guidance potential of the school and community. It proposes a system of organization which draws upon the total resources of the community and stresses the broad implications of guidance. Guidance is taken to apply not just to the "problem" child but to *all* children. Nor does the author feel that the function of guidance should be confined to the guidance worker alone. Guidance is the responsibility of teacher and parent alike, and in no small degree it is the obligation of the community itself.

The home-room teacher, however, has long been in a most favorable position among the faculty to guide the pupil, and thus one of the primary objectives of this book is to help to make the teacher, or prospective teacher, aware of the guidance advantages of his position. The author hopes that this is essentially a "textbook"—that it is a practical and useful book for study—and that it will be useful for the home-room teacher, the guidance worker, and the teacher-in-training.

Expressed in simple terms, the book seeks to give the teacher and student an honest appreciation of what guidance means, what it can accomplish, and how it can contribute to the growth and happiness of the pupil by helping him to orient himself toward his future role of citizen and parent.

FRENCH, W. M. *American Secondary Education*. New York 3: The Odyssey Press, Inc. 1957. 543 pp. \$4.25. With certain exceptions, it presents the conventional subjects commonly taught in such a course, as revealed by the study of course outlines from several institutions which have an enviable record in the preparation of teachers for the junior and senior high schools.

There are, however, certain departures from the practice of well-known texts in this field. Two in particular, the author believes, will commend this book. Both private and parochial secondary education are treated more fully than in other texts. Whereas other authors make only incidental mention of these

schools, the present text devotes a chapter to each. It is the author's belief that these schools deserve this more extended treatment, for they provide secondary education for more than a tenth of the nation's adolescents. Even if they will never teach in such schools, prospective teachers need to acquire some understanding of their place in our American society. The second departure is a more exhaustive treatment of the origins and historical development of the American secondary school. While history *per se* may be as dull to prospective teachers as some writers imply, the author believes that history, when related to present issues and concerns, forms a valuable part of a course in secondary education. Only through a more complete understanding of the development of the high school can the prospective teacher acquire enough perspective to understand or to challenge generalizations that often appear in texts for courses in education. The elimination of the old standby course in the history of education makes it imperative that pertinent historical material be incorporated into a course in secondary education—not as an end in itself, but as a means to understanding where we are and where we are going.

GILCHRIST, R. S.; W. H. DUTTON; and W. L. WRINKLE. *Secondary Education for American Democracy*, revised. New York 16: Rinehart and Company. 1957. 441 pp. \$5. In 1942, two of the authors of this revised edition completed the writing of the first edition. At that time they were firmly convinced that secondary schools at their best could be a significant force in American life. They were further convinced that most secondary schools fell far short of fulfilling their roles. They were bothered by several things about secondary schools. Mere verbalization—just saying words—seemed too often to be a substitute for straight thinking and intelligent discussion. There seemed to be a wide gap between what was talked about and what was done—between philosophy and practice. In far too many schools there was an unthinking acceptance of existing practices and an absence of challenging inquiry. They wrote the original edition in the hope that it might help in a small way to improve these conditions. Throughout the book there was an emphasis on problem solving and critical thinking. They tried to raise questions and to present points of view rather than to give pat answers.

The authors present this revised edition to keep abreast of the changing conditions in American life and the resulting new demands on the secondary school. The attacks on and criticisms of public schools in the late 1940's and early 1950's were followed by an unmistakable wellingup of positive interest in improving education on the part of many Americans, and it has become increasingly clear that, as Cremins states in "Public Education and the Future of America," a vigorous reappraisal of public schools is now taking place. How America is to function as a leader among the nations of the world, and what we as a people can do to take advantage of technological advances to better our way of life, are two difficult and challenging questions that are constantly before us. With secondary school enrollments increasing in a spectacular way, it is obvious that the role the secondary school will play in solving these and other important problems is vital.

This edition is a completely new book. It has, of course, many characteristics of the first volume; but its organization has been developed in relation to the problems of secondary education as the authors see them in 1957. A third co-author, experienced in the fields of curriculum improvement and teacher education, has joined the original authors in writing the revised edition.

In Part One, the role of the secondary school is discussed in relation to the needs of America and the nature of adolescents whom the school serves. Ways in which the prospective teacher can develop into a good secondary school teacher are then enumerated. Parts Two and Three describe in practical terms secondary school programs as they now exist and practices which give the most promise for improvement. In Part Four, the role of the teacher in improving secondary education is indicated. An attempt is then made to envision secondary education in America in future years.

A Guide for Teaching Social Studies, Kindergarten—Grade 7. (1957. 195 pp. \$3.50.) and *A Guide for Teaching Social Studies, Grades 6—12.* (1957. 173 pp. \$3.50.) Minneapolis 13: Minneapolis Public Schools. These social studies guides are the end product of a three-year social studies curriculum study which was participated in by a large number of teachers, principals, consultants, and lay persons in the Minneapolis Public Schools. Frances Reese, Consultant in Curriculum, was the consultant in charge of the entire project; Dr. Kopple Friedman, Consultant in Curriculum, and Miss Katherine Michaelsen, teacher on special assignments, were co-chairmen.

For both these volumes, the chapters of general interest such as those pertaining to learning, growth characteristics of pupils, skills for the social studies, and the teaching of the social studies are the same. In developing these guidelines for content, four major objectives have been kept in mind—personal and social development, citizenship, international understanding, and economic competence. The course throughout is an integration of history, geography, government, economics, and sociology. Grade seven is devoted to orientation to the junior high school, life in the western hemisphere and basic concepts of world geography; grade eight, to narrative history of the United States of America; grade nine, to the young citizen and his world; grade ten, to the United States history in a world setting to 1865; grade eleven, to United States history from 1865 to the present; and grade twelve, modern problems.

HANSEN, K. H. *High School Teaching.* New York 11: Prentice-Hall, Inc. 1957. 431 pp. \$5.75. The author states that he has written this book with three specific purposes in view: (1) to help the beginning high-school teacher to understand what secondary education in our society really means to the high-school students themselves; (2) to show the teacher how to use effective classroom teaching methods by applying known principles of human behavior and learning to specific classroom problems; and (3) to help the teacher to understand his role as an educational leader of youth in school and community. Secondary education today faces major responsibilities and many difficult tasks. It is the high-school teachers, in large part, who must actually accept the responsibilities and carry out the tasks of secondary education. The book is composed of 14 chapters—The High School in Its Social Setting, The High School Student, What Do Our High Schools Teach?, Organizing the Classroom Learning Environment, Making Schoolwork Meaningful, Organizing Learning by Wholes, Encouraging Learning Through Activities, Using Instructional Materials Effectively, Evaluating Learning Outcomes, Diagnosing Common Learning Difficulties, Utilizing Environment as a Teaching-Learning Aid, Extra-Class Activities, Guiding Personal Development, and Growth in Teaching. An Appendix includes the seven cardinal principles of secondary education, the purposes of education in American democracy, the ten imperative needs of youth of secondary-school age, and twenty-one functions of the

secondary-school age, and twenty-one functions of the secondary school expressed in terms of problems of adolescents.

Higher Education in a Decade of Decision. Washington, D. C.: Educational Policy Commission, 1201-16th Street, N. W. 1957. 164 pp. \$1.50, paper bound; \$2. cloth bound. Faculty salaries must be doubled in the next 10 years, or the quality of American colleges will risk sharp deterioration. This is the strongest recommendation by the Educational Policies Commission in this book which was four years in the making. The commission warns that all other expenditures will be in vain if the calibre of the facilities is allowed to deteriorate. Financial allocations for instruction have declined sharply, from 43.6 per cent of total higher education expenditures in 1929-30 to 33.3 per cent in 1953-54.

"An emergency drive to raise salary levels substantially should be launched," the commission urges. "Ordinary annual increments of a small per cent of base salary are not adequate to hold present faculty members and certainly not to attract well qualified new ones." They say that the psychological satisfactions that come from membership in the academic community are not and should not be substitutes for adequate salaries.

The study, prepared in consultation with many experts on higher education, answers these basic questions involving broad social policy: Who will go to college? What should be taught? What research and public service facilities should be maintained? Who will teach? How should policy be made? How can higher education be financed?

Pointing out that enrollments are mushrooming not only because of more entrants but because more students are staying in college longer, the commission says, "The most important problem is not that of preventing individuals who lack the requisite ability or preparation from going to college, but is that of attracting the many able students who do now receive education beyond the high school."

Between now and 1970 the college age group will increase in an even greater proportion than the total population. "This is no time for panic or despair," the commission says. "Higher education in the United States has doubled its enrollment four times since 1900; it can do so again."

Enrollments will cause many smaller colleges to double or triple in size, but the commission believes this will be more economical than founding new colleges. However, some new institutions, especially community junior colleges, must be built in areas now lacking sufficient educational opportunities. The commission warns that junior colleges are not an educational panacea and will be expensive. Careful statewide planning, not local pride, should be a requisite to their founding.

The commission commends specialization based upon a sound core of general education, with all curricula constantly under survey. Calling attention to the educational values found outside of the classrooms, it warns, "Unfortunately, in many institutions the curriculum and the extra-curriculum seem to be working at cross purposes. The excesses of athletic competition and the cultivation of an irresponsible recreational atmosphere are hardly justifiable in terms either of the traditional university or of the needs of modern society."

They urge more independent study, less spoon-feeding by lectures and examinations, increased counseling services and a re-appraisal of many specialist programs. For some semi-professions, college training may be reduced from four years; for other occupations, the requirements should be lengthened.

Colleges must limit their offerings to fields for which they have reasonable demands and adequate resources.

Recent trends toward increased group research are healthy, the commission feels, but the individual scholar must be free to pursue truth in his own fashion. "The ivory tower is in many respects the main crossroads of social currents."

The commission also recommends: faculty assistance on administrative planning; examining the doctoral program to recognize students interested more in teaching than in research; and recruitment from recent or present students, women, minority groups, older persons, and specialists available part time. New permanent construction should be tailored to academic functions. "It is not desirable to build now the academic slums of the 1970's, nor to clutter campuses with 'permanent temporaries'." More scholarships are needed, with a Federal program assisting. States, churches, foundations and alumni will also have to increase their support if higher education is to weather the onslaught.

KINDRED, L. W. *School Public Relations*. Englewood Cliffs, N. J.: Prentice-Hall, Inc. 1957. 464 pp. \$6. Along with the new concern for public relations has come much misunderstanding of what it means, how programs are developed, and toward what ends they should be directed. This book attempts to clarify the present confusion and chart a course of action for schools that is both practical and consistent with the role of the school as a social institution in a democracy. It recognizes that publicity is inherent in public relations, that informational service is necessary for interpreting the school to the community and the community to the school, and that the heart of a dynamic program lies in citizen cooperation and participation in affairs of the school.

It emphasizes the importance of designing programs around the relationship problems of the school and its special publics. The position is taken that unless these problems are dealt with satisfactorily, there is small likelihood that parent and nonparent taxpayers will take a positive interest in the institution, harbor good will toward the staff, provide adequate support, and feel a sense of responsibility for the progressive improvement of public education.

The treatment of public relations presented here is comprehensive in scope and include up-to-date findings and conclusions of research workers and practitioners in the field. It contains many more ideas and suggestions than any one system could undertake without devoting entirely too much time, money, and manpower to this respect of its total enterprise. In this respect, however, it supplies a ready source of reference for the enrichment of local efforts and a guide for the development of sound and defensible programs.

KRUG, E. A.; C. D. BABCOCK; J. G. FOWLKES; and H. T. JAMES. *Administering Curriculum Planning*. New York 16: Harper and Brothers. 1956. 334 pp. \$4. This book has been written with the belief that "an effective, functional curriculum for either elementary or secondary schools demands not only competent and high-minded leadership from the State Department and the central office of the local school system but, equally essentially, requires continued and continuous participation by all concerned—teachers, children, and laymen, as well as administrative boards and administrative and supervisory officers. Inspiring as is the concept that school curricula must enjoy the concerted efforts of the various groups just enumerated, care should be taken to realize that such a policy with respect to curriculum construction and revision

carries the hazard of producing a circumstance of much ado about nothing, the whiling away of many precious hours to no avail, and a looseness of what goes on in a classroom whereby results an intolerable absence of an essential solid core of learning throughout a given school.

In short, participation of diverse groups in the establishment of school curricula demands skillful and sustained "curriculum planning." The volume hereby presented deals with school administration and curriculum planning. The meaning, significance, and some of the major processes involved, with particular emphasis on the relationship between administration and curriculum planning, are stressed. The authorship reflects an unusual combination of ability, professional preparation, and experience in that the authors have had or are now gaining experience in the training of undergraduate and graduate students in the field of "curriculum," the administration of curriculum in a large school system, and the administration of a curriculum program of a State Department of Public Instruction.

LINDER, I. H. *Problems and Practices of Secondary School Administration*, revised. 1957. 127 pp. This edition is the seventh revision of a syllabus developed over a period of ten years while teaching summer school and extra-hour courses at Stanford University and at Colorado State College. It began as an effort to bring theory and practice together which is admittedly both difficult and presumptuous. The weaknesses of courses in administration grow naturally out of the ease with which administrative problems may be taken out of their setting and discussed on a theoretical plane uninfluenced by "the ache of the actual" with which the practice of administration is surrounded. Theory and practice need not be antagonistic, and each loses something of its force when divorced from the other. The assumptions often ignored in theory are scarcely more open to criticism than the lack of clarity of purpose in much of our administrative practice.

It is difficult to organize material which has meaning for the beginner without its appearing to the administrator of experience to be an elaboration of the obvious. This accounts for the very elementary considerations included along with the more involved problems. The defense of the critical tone at certain points is that administrators in training need to face the stubborn realities with which the practice of administration is usually beset. Promoting a too-optimistic view of the administrator's work is no adequate preparation for success in a public service that is, at best, very difficult. The book is divided in six sections—Functions and Qualifications of the Administrator, General Aspects of Internal Administration, Staff Selection and Staff Working Relations, The Program of Studies and Guidance, The Improvement of Instruction, and Other Problems: A Supplemental Resource List.

LLOYD, W. P.; F. P. ROBINSON; and E. S. BORDIN. *Student Personnel Services in Japan*. Washington 6, D. C.: American Council on Education. 1957. 123 pp. The institute for advanced training in student personnel services in Japan, held at Tokyo University in the summer of 1955, developed as a natural sequel to the institutes in student personnel services which were held in Japan in 1951-52. This report of the 1955 institute attests to the degree to which several widely separated and diverse organizations in education have been able to cooperate on an educational problem of common concern. The institute here reported was sponsored by Tokyo University, the National Association for Student Personnel Services, and the Japanese Ministry of Education, in Japan; and by the American Council on Education in the United

States. Special acknowledgement is also made to the Rockefeller Foundation for its financial support which made possible both the participation of the American faculty in the institute and the publication of this volume.

LURRY, L. L., and E. J. ALBERTY. *Developing a High School Core Program*. New York 11: Macmillan Company. 1957. 307 pp. \$4.75. This volume is designed to give some direction to those concerned with developing a core program in the high school. The writers take the position that a program of general education should play a significant role in developing effective citizenship. In Chapter I the traditional concept of general education is examined critically and the need for reorganization is established. The assumption is that the ideals of democracy and an analysis of the common needs, problems, and interests of young people provide a sound basis upon which to organize a general education program. In Chapter II the term core is defined. Specific purposes of the core program and the general characteristics which might identify such a program in action are presented. The problem of designing the core program is discussed in Chapter III. In this chapter the writers discuss what is involved in a problem area study and present in detail one formulation of problem areas. Accounts of how problem area studies were made in two actual situations are presented in Chapter IV.

Chapter V suggests a technique which teachers find helpful as they work together on developing resource guides for use in the core. An illustrative resource guide is also presented in this chapter. The question of how to use a resource guide in developing a learning unit is considered in Chapter VI. More specifically, this chapter deals with the kind of preplanning a teacher does when he is committed to teacher-pupil planning in the classroom and how the teacher plans, develops, and evaluates a learning unit cooperatively with pupils. The latter is illustrated by means of detailed descriptions of core classes in action. The purpose of Chapter VII is to explore the role of the special-interest areas in the core program. Some guiding principles for the participation of special-interest-area teachers are presented and two levels of participation, i.e., the preplanning level and the action level are discussed and illustrated. In Chapter VIII the writers attempt to analyze the tasks involved in reorganizing general education on the basis of a core program. Also included in this chapter are several examples of how groups actually have worked in specific situations to develop core programs; and, finally there is a brief summary statement. The Appendix includes resource materials related to the fifteen problem areas presented in Chapter III and suggestions for use of the core block of time.

MEYER, A. E. *An Educational History of the American People*. New York 36: McGraw-Hill Book Company, Inc. 1957. 464 pp. \$6. Written in a lively, yet scholarly style, this book examines the salient landmarks of American educational history from the early 17th century to the recent past. A sufficient amount of American history is introduced to give meaning to the nation's educational development. Because the author believes that education is a reflection of the social order, at all times and in all places, he has interwoven the educational past with its cultural context.

This book contains a fuller treatment of the educational history of the twentieth century than has heretofore been put into a general history of American education. Material will be found on adult and worker's education and on intercultural and international education. There is a very complete history of Progressive education. The material in this text has been tried

out in the author's classes for a period of twenty-five years. Thus, the book is as clear and succinct as the actual teaching-learning situation can make it.

O'CONNOR, D. J. *An Introduction to the Philosophy of Education*. New York 16: Philosophical Library. 1957. 154 pp. \$3.75. Education, like every other important branch of knowledge, has its underlying philosophical problems. It is these problems and the attempts to solve them which together make up the philosophy of education.

Although the scope and methods of philosophy have been completely transformed in the last forty years, no attempt has been made before to relate this important intellectual revolution to the philosophy of education. In doing so, this book provides a simple explanation and illustration of what philosophy can (and cannot) do for educational thinking. In this way, it offers a modern introduction to philosophy which is directed to the needs and interests of practising teachers and of students of education in training colleges and universities. Only those topics are discussed which are directly relevant to educational theory or practice and they are treated in an elementary way which does not presuppose any knowledge of philosophy. Full bibliographical notes are provided.

PERKINS, L. B. *Work Place for Learning*. New York 22: Reinhold Publishing Corporation. 1957. 64 pp. (11" x 11") \$4. This may appear to be a book about school architecture. Actually it is not. These quotes express the scope of the book and the author's philosophy: "We make the world a part of every student's curriculum. Free the classroom of its traditional design straight jacket. Ask any teacher about basic requirements for classroom and school design. The architect must fashion a tool for the teacher. For classroom lighting is more art than science. Classrooms 'borrow space' so that they feel larger. The principal's office doesn't have to be an ogre's den. It is one thing to house books and another to make reading a delightful experience. The student never feels 'unchained' when he leaves. In terms of years of use and effectiveness . . . this building would be the most economical that could be designed."

REMMERS, H. H., and D. H. RADLER. *The American Teenager*. Indianapolis 7: Bobbs-Merrill. 1957. 267 pp. \$3.75. What concerns today's teenager most? How common are his problems? How are his attitudes affected by his sex, his family's income, where he lives, his religious background? This book answers all these questions and more. It answers them with actual statistics and with unsigned letters from teenagers themselves.

Since 1940 social scientists at Purdue University have been asking thousands of teenagers how they feel about hundreds of important matters—and why they feel as they do. This book is the only general report to the public on these years of research. It is the best picture derived from what the teenager himself says. The Purdue researchers were the very first to study adolescent behavior by asking teenagers, under scientific control, what they thought. Their study gives us an accurate composite of our American youth—his plans, his problems, his fears, his prejudices, his beliefs and disbeliefs.

Using the most advanced polling techniques, the Purdue scientists queried a representative cross section of our adolescent population. All parts of the country, all nationalities, all religions are represented. Teenagers from both high and low income families, whose parents are highly educated or had little schooling—all responded. The findings of the Purdue Opinion Polls have all been reported in technical journals and books. In *The American Teenager*

they are, for the first time, concisely summarized for the reader without special training in the language of social science.

ROBERTS, N. H.; JEANETTE WIESLER; and H. K. GARRETT. *Physical Education Handbook for Elementary Teaching*. San Antonio, Texas: The Naylor Company, Box 1838. 1957. 156 pp. \$3. This book provides a wide variety of games for the elementary school, both indoor and outdoor. Specific directions are outlined for each game. Also suggestions are given as to the age level to which each game is best adaptable. The games are classified under the following types: holiday games, stunts and self-testing activities, ball-type games, relays, safety games, and rhythms. An index provides an alphabetical as well as a classified listing.

ROSENSTENGEL, W. E., and J. N. EASTMOND. *School Finance—Its Theory and Practice*. New York 10: Ronald Press Company. 1957. 450 pp. \$6.50. The purpose of this book is to provide a thorough discussion of the theory and practice of public school finance. Rapid social changes since World War II have produced in the public schools an enrollment which is much larger than would have been expected a generation ago. Likewise, the economic level achieved by the American people since the war has been most unusual. These factors, together with the changing value of the dollar, have brought forth more acutely some of the old as well as many new financial problems. The understanding of these problems and the formulation of sound solutions have become important to the success of school administration. This volume presents facts and principles which should prove helpful in the financial management of the public schools.

The book is divided into four parts: Part One discusses the principles which are important in understanding public school finance, with emphasis on their background and development. Part Two deals with the methods of financing public education and the structural and operational features of a satisfactory state program. The leadership function of the state and the need for participation by the federal government in the financing of public education are presented. Part Three treats the management of school funds on the local level. The local educational leader must have the knowledges and skills necessary for budgeting—and for the management of income, indebtedness, and expenditures—in order that he may advise the board of education on the operation of the public schools. Part Four discusses special problems which the administrator must face in connection with the financial management of the public schools, such as payroll procedures, insurance, and transportation.

This book is designed to serve as a text for colleges and university students who are preparing to become school administrators and as a day-by-day guide for superintendents, principals, and business managers. Carefully phrased topics for study and discussion are included with each chapter to provide the student with further applications of the principles and to direct him in more detailed exploration of the many areas of school finance.

SARGENT, E. P. *The Handbook of Private Schools*. Boston 8: Porter Sargent, 11 Beacon Street. 1957. 1216 pp. \$8. This thirty-eighth edition is an annual descriptive survey of independent education. The first section is composed of a series of 14 articles (35 pages) pertaining to the general topic of "The Challenge of the Gifted," by 15 leading administrators. Following this, is a listing of the names and addresses of private school principals under the heading of "Who's Who" (31 pages). The third section (576 pages) is devoted to descriptions of representative and important private, primary, and secondary

schools selected impartially on the basis of their educational contribution. These schools are arranged geographically by states and alphabetically by cities and towns. The order follows from New England down the east coast to the south central states, and from the Great Lakes states through the Rockies to the North Pacific states, California, and Hawaii.

The fourth section, "Private Schools Illustrated" presents more than 250 independent schools. Herein are the schools' own statements with photographs illustrating the facilities and activities which characterize each school. These are divided into "Boys Schools" (124 pages), "Girls Schools" (46 pages), and "Coeducational Schools" (68 pages). This section is also available as a separate publication.

Also included are announcements of summer camps. This is followed by a listing of academic schools classified as follows: secondary boarding schools to \$1300 and \$1900 and over; elementary boarding schools \$1600 and over; secondary boarding schools offering general curricula and a postgraduate year; boarding schools offering make-up course or tutoring; schools accepting boarding students ages eight or younger; coeducational boarding schools; schools with larger enrollments from foreign countries; Episcopal schools; Roman Catholic schools; and Friends schools. Another section is devoted to a listing of educational associations and a listing of independent schools, arranged alphabetically by states, showing these educational associations of which they are members. Sixteen pages of maps are included to show the location of the schools included in the Handbook. Other information included is a concise listing of schools arranged alphabetically by states and by cities within each state and also classified under Boarding Schools, Day Schools, Home Schools, Tutoring and Remedial Schools, and Other Schools. Directories included are: firms and agencies; an analytical subject index; educational associations; foundations; yearbooks; periodicals of interest to educators; publications carrying advertisements about schools; an index of schools, and other information of help to those interested in independent schools.

Other handbooks, separately bound, available from the same publisher are *Junior Colleges and Specialized Schools and Colleges*, *Directory for Exceptional Children*, and *Guide to Summer Camps*.

Schools on the Threshold of a New Era. Washington 6, D. C.: American Association of School Administrators. 1957. 222 pp. \$3. This is the annual report of the executive secretary of the American Association of School Administrators, covering the calendar year of 1956 with limited reference to certain happenings in the early months of 1957. It also contains a record and addresses of the Association's national convention held at Atlantic City, New Jersey, February 15-20, 1957.

SCHWARTZ, ALFRED, and S. C. TIEDEMAN. *Evaluating Student Progress*. New York 3: Longmans, Green and Company, Inc. 1957. 448 pp. \$4.75. The authors seek to develop an understanding of measurement and evaluation in relation to the total learning process. They emphasize the activities and responsibilities of the classroom teacher, further the analysis of student problems and discuss "everyday" methods as well as standardized procedures. An attempt has been made to give the book readability and clearness.

SHARP, D. L., editor. *Why Teach?* New York 17: Henry Holt and Company, Inc. 1957. 254 pp. \$4. In this unusual and appealing collection, more than a hundred celebrated men and women offer their personal tribute to the teaching profession and to the teachers who have influenced their lives. The

author, believing from her own experience that teaching is one of the most rewarding of all professions, has gathered these articles together to prove it.

A brief sampling of the contents will suggest the richness and scope of this book. In "Teacher Believed in Me," Helen Keller writes of Anne Sullivan, whose great warmth and understanding never faltered in her difficult task. Ezra Taft Benson discusses the special challenges of teaching in rural communities, while Dr. V. K. Wellington Koo describes the role of the teacher in China. Senator Margaret Chase Smith, in "Best Hope for Peace," looks to the teachers of America as our strongest safeguard for the future. Adlai Stevenson, Dr. Karl Menninger, Harry Emerson Fosdick, Yehudi Menuhin, Sam Levenson, Cornelia Otis Skinner, Clifton Fadiman, and many others state the case for teaching in their own highly personal terms. Some of the most striking contributions are from teachers themselves, describing the trials and satisfactions they have found in their work.

STILES, L. J., editor. *The Teacher's Role in American Society*. New York 15: Harper and Brothers. 1957. 320 pp. \$4.00. The social and civic no less than the educational role of the teacher in American society is the subject of this analysis and appraisal by a distinguished selection of educators. In light of the recent transitional period of confusion and frustration for the public school teacher, this study seeks to clarify the altered status of teachers, the professional problems they face, the social forces they confront in their lives and work, and the progress in status gradually being made. The authors consider the complexities of the teacher's social and professional relations, the teacher's conduct as a private person, as well as his responsibilities and special restrictions as a citizen.

The contributors to this Yearbook give particular consideration to the various roles of elementary- and secondary-school teachers. They examine anew the social forces that impinge upon teachers in an effort to help them understand themselves and their relationships to each other, to their work, and to their times. Together the authors look to the future in terms of the individual teacher's preparation, his tenure, and the ways to increase popular interest in entering this profession and to assure it a higher social acceptance.

Teacher Demand and Supply in Michigan, 1954-1970. Ann Arbor, Michigan: J. W. Edwards, Publisher, Inc. 1956. 148 pp. This study deals generally with the problems faced by teacher education in the state supported institutions of higher education in Michigan, but the major part of the study deals with the characteristics, training, etc. of the present teachers in Michigan schools.

THUT, I. N. *The Story of Education*. New York 36: McGraw-Hill Book Company. 1957. 420 pp. \$5.95. In this new work the author provides a historical and comparative approach to the philosophy of education. He discusses all the main philosophical theories concerning the ways in which knowledge is received, discovered, and constructed, and illustrates them with examples from educational history.

The book deals with the origins and evolution of the theory and practice of education in the Western World. Part I defines and describes at length man's continuing need to teach his young the ways that are good. Thus, philosophy as related to education is defined as man's search for knowledge of the good, and as having a direct bearing on what is taught in the schools.

In Parts II, III, and IV, the search for knowledge of the good is described as it was conducted, in chronological sequence by the Greek philosophers, by

religious leaders, by logicians, by scientists, and, ultimately, by the common man. Special attention is given to the impact each major philosophical movement made on educational institutions, curricula, and methodology.

Part IV treats particularly the effects which modern scientific and psychological thinking are having upon philosophy; and how the modern understanding of the nature and limitations of human knowledge also has far-reaching implications for the curriculum, the methodology, and the administrative practices in our schools. A special bibliography is provided at the end of each major division. Bibliographical items are classified as they supplement the philosophical, the historical, or the psychological materials provided in the text.

TOMKINS, S. S., and J. B. MINER. *Picture Arrangement Test*. New York 10: Springer Publishing Company, Inc. 1957. 400 pp. \$10. The PAT is based on a new theory for scoring and interpretation of personality tests in general. The authors present this theory and show how the PAT was developed as a useful application of it.

The PAT opens a new era of projective testing. It can be as readily administered to large groups as to individual persons, and its scoring requires little time of the trained psychologist. The PAT is so constructed that the unusual response can easily be extracted—the logic of test interpretation resting “upon the response that is rare or improbable when one compares one person with others.” In addition to being easily administered and easily scored, the PAT is the first and only projective test that is standardized on a representative sample of 1500 of the U. S. population, according to educational level, age, and intelligence.

The psychologist draws the individual personality profile from 500 keys that define such factors as work interest, sociability, attitudes toward opposite sex, anxiety, aggression, phantasy, life. For more detailed profiles, the verbal material resulting from the test is available to support and refine the interpretation.

The results of testing more than 1500 mental patients (paranoids, schizophrenics, manic-depressives, organics, neurotics, and character disorders) in a hundred institutions are included and compared with one another and with the results of the normal sample. Methods of scoring the PAT are described fully.

TRAXLER, A. E. *Techniques of Guidance*, revised. New York 16: Harper and Brothers. 1957. 384 pp. (8½" x 11"). \$6: The present book is a rather thoroughgoing revision of the 1954 book. The general organization has been retained, but three new chapters have been added. Most of the other chapters have been fairly extensively rewritten, and hundreds of recent references have been consulted and cited. The three new chapters are Chapter II, “Essentials in Launching a Guidance Program,” Chapter XIX, “Counseling as a Learning Function,” and Chapter XX, “Group Work in Guidance.” The chapters most directly concerned with tests, Chapters V, VI, and VII, have been rewritten, for these chapters include thousands of details about tests which had to be brought up to date. Chapter III of the present book, “Opportunities for Young People,” has been greatly expanded. Most of the other chapters have been extensively revised. Fewer changes were made in Chapters I, IX, X, XI, XII, XV, and XVI, since those chapters are mainly concerned with general principles and practices of measurement, record keeping, case studies, and teacher guidance, which do not change with the passage of time as detailed techniques do. Chapter XXI, on reading resources, was completely rewritten.

One authority in guidance comments about the book as follows: "This compact volume might well be called 'The Counselor's Handbook,' it is so full of practical help to all who are engaged in the guidance service. It meets a long-felt need for a brief, comprehensive, practical guide through the maze of tests and other instruments now offered as panaceas, or, more modestly, as aids in guidance. . . . This book should be a must for every vocational counselor and should be in the professional library of every school."

Vital Issues in Education. Washington 6, D. C.: American Council on Education, 1785 Massachusetts Avenue, N. W. 1957. 184 pp. \$2. Vital issues in education are all ultimately concerned with the single vital issue of the development of the individual student to the greatest extent possible. The Twenty-first Educational Conference, sponsored jointly by the Educational Records Bureau and the American Council on Education, contributed knowledge, ideas, and suggestions stimulating to those at the meeting and of continuing interest to a wider audience to be reached by the publication of these proceedings.

The revision of curricula, the inspiring of students in fields of their special aptitudes, the problems of counseling to assist the students in realizing his potentialities, the development of better measurement as an aid to teaching and counseling, these are among the vital issues discussed that have direct bearing upon the development of the individual student. Correlative with these issues are the pressing problems of increasing enrollments and the attendant teacher shortage. Administrators and teachers and a concerned public are presented with some of the alternatives that face them in making decisions. Assistance to teachers, ways and means of putting more teachers into the classrooms—the very marshalling of suggestions is evidence of the necessity and the will to find solutions.

Books for Pupil-Teacher Use

ACHESON, P. C. *America's Colonial Heritage.* New York 16: Dodd, Mead and Company. 1957. 217 pp. \$3. The author tells the dramatic story of the varied paths of history that form the rich heritage of this nation. From her experience in more than five years of teaching, she has devised this book to fill a sore need in the literature on the subject. Here is an account that is as exciting as it is informative, devoted not to the categorical presentation of dry facts but to the assimilation of those facts in the vast panorama of ideas and events that brought the thirteen colonies to the brink of independence.

AHNSTROM, D. N. *The Complete Book of Jets and Rockets.* Cleveland 2: World Publishing Company. 1957. 160 pp. (7¼" x 11"). \$4.95. Fifteen years ago jet planes were still on the drawing boards, and modern rockets were barely beyond that stage. Today, planes capable of twice the speed of sound—and even more—are being built. Dramatic sweptback and delta wings have replaced standard wing shapes; speed is no longer measured in miles per hour but in Mach numbers. Experimental rockets are reaching higher and higher altitudes.

Here is the fascinating, up-to-the-minute picture story of the advances in aviation that have brought us into the new Air Age of Speed, concisely told in clear, simple terms by an aviation writer and editor who has been an authority in the field for many years. Like the author's earlier book, *The Complete Book of Helicopters*, it is handsomely illustrated with over 100 photographs and diagrams, the most recent and the most explicit available.

AHERNS, M. R.; N. F. BUSH; and R. K. EASLEY. *Living Chemistry*, second revised edition. Boston 17: Ginn and Company. 1957. 640 pp. (8" x 10").

\$5.28. Much of the original text material has been rewritten. Obsolete information has been deleted and the very latest research findings have been incorporated in almost every unit. Moreover, the authors have made many changes based upon suggestions received from many teachers.

New illustrations and descriptive drawings have been generously placed throughout the book. The film aids listed in the appendix have been greatly expanded, including the addition of filmstrips and slides. Additional information on the halogens, sulfur, phosphorus, carbon, silicon, and a number of important metals has been added.

Recent research findings of nuclear physicists and chemists have not only made major changes necessary in several units but also have caused changes throughout the book. Furthermore, a complete unit, "Nuclear Science in a Changing World," has been added. In this unit information is provided based upon the most recent research and findings of nuclear scientists. The material is written clearly and simply, so that it can be understood by high-school students.

The units in this book have been selected because they are the ones most consistently suggested by the many groups of pupils who have worked with the authors. The problems are real problems which have been proposed, year after year, by pupils. The information presented for the solution of each problem is based on the researches of these same groups of pupils. Actually, then, these experiences in chemistry were organized through co-operative planning and are based on the problems and interests of pupils.

Part I, "Fundamentals of Chemistry," includes the minimum material which is necessary to give pupils enough background to make possible a direct attack upon the meaningful problems which are related to chemistry. Part II, "Chemistry of the Individual," deals with problems of a personal nature. Part III, "Chemistry of the Home," contains a discussion of problems related to the home. Part IV, "Chemistry of the Community," gives consideration to problems of the immediate and the world-wide community. Though Part I contains the needed basic facts and concepts of chemistry, it should be understood that in Parts II, III, and IV many additional facts and concepts are presented as they are needed for the solution of practical problems.

The reader will find many unusual features in this book. This high-school chemistry has given direct consideration to vocations and hobbies related to chemistry. Throughout the book social implications are stressed, with special emphasis upon consumer implications. There are exercises at the end of each problem and objective tests at the end of each unit. In "Problems for Further Study," provision is made for pupils whose interests are varied and for those who care to solve additional problems. Years of searching on the part of the authors and their students have made possible an excellent bibliography for each unit. The references listed in each bibliography have been carefully selected. The purposes listed near the beginning of each unit are a composite of those which have been set up by pupils.

ALY, BOWER, editor. *Alexander Hamilton: Selections Representing His Life, His Thought, and His Style*. New York 23: The Liberal Arts Press, Inc. 1957. 287 pp. \$2.75. This title is one of the American Heritage Series, a group of inexpensive student editions designed to show the development of American thought and the shaping of American traditions. Herein are contained a selection of available documents which, to the editor, seem best to represent Hamilton's writing and speaking as the instruments of policy. These selections

show the progress of Hamilton's discourse through the years from 1769 to 1804. In addition, the editor has supplied critical commentaries and certain biographical materials to frame Hamilton's discourse in the context of his life.

BARNET, BERMAN and BURTO, editors. *Eight Great Tragedies*. New York 22: New American Library of World Literature, Inc. 1957. 448 pp. 50¢. The complete text of *Prometheus Bound* by Aeschylus, *Oedipus the King* by Sophocles, *Hippolytus* by Euripides, *King Lear* by Shakespeare, *Ghosts* by Ibsen, *Miss Julie* by Strindberg, *On Braille Strand* by Yeats, and *Desire Under the Elms* by O'Neill.

BARON, A. L. *Man Against Germs*. New York 10: E. P. Dutton and Company, Inc. 1957. 320 pp. \$4.50. Thirteen germs—their nature, their effect on human life and history, and the means that man has developed to combat them—are the subject of this book. Like tidal waves, death-dealing plagues have swept over mankind down the ages right to our own day. Some have been conquered. Others still threaten man's feeble defenses. This is the story of the valiant struggle of scientific men to find effective weapons against disease, of their dramatic successes and of their often discouraging failures. In this day of "miracle" drugs much has been achieved, yet there are great unfilled gaps in our knowledge which prevent men and germs from living together without warfare.

BEAVERBROOK, LORD. *Men and Power: 1917-1918*. New York 16: Duell, Sloan and Pearce. 1957. 448 pp. \$6.50. This book is the first of three volumes of Lord Beaverbrook's historic memoirs. In this volume, all of the great figures of World War I appear in fascinating gallery portraits. Lloyd George holds the center, while around him circle Bonar Law, Baldwin, F. E. Smith, Lord Reading, Asquith, Lord Northcliffe, Winston Churchill, Balfour, Sir Edward Carson, Earl Haig, Robertson, and many others—all leading contestants for power in one of the most extraordinary and politically exciting periods in modern times.

As one of the few survivors who were deeply involved in the events of the day, the author unfolds the narrative with the dramatic interest and suspense of a novel, revealing the rivalries and conflicts at the top—the struggle for power and for office that went on in London while the fighting in Flanders moved to its climax.

Unique features of this volume include: thirty-five firsthand thumbnail biographies; full text of many private papers never published; twenty-four-page topical index.

BERLIN, ISAIAH. *The Hedgehog and the Fox*. New York 22: New American Library of World Literature, Inc. 1957. 128 pp. 35¢. An essay on history as viewed by Leo Tolstoy in his book, *War and Peace*.

BERRILL, N. J. and JACQUELYN. *1001 Questions Answered About the Seashore*. New York 16: Dodd, Mead and Company. 1957. 317 pp. \$5. Do you know that life along the seashore, on the beach, in tidewater pools and in ocean shoals is perhaps the most numerous, varied and fascinating of all places on the earth? It has been settled there for countless aeons and is awaiting only your curiosity to welcome you into a whole new world of living things. Everyone has a thousand questions to ask about sand, tides, shells, seaweeds, starfish, scallops, crabs, jellyfish, sponges, seahorses, fishes, birds, flowers, grasses and all the other myriad creatures and objects which he sees as he wanders along a beach or pokes among rocks by the ocean.

BERRY, ERICK. *Horses for the General*. New York 11: Macmillan Company. 1957. 191 pp. \$2.75. Lem Devries was too short to enlist in General Washington's army, but he was plenty-smart enough to find a way to make himself indispensable to the army, even so. Tough and wiry, as hill folk are apt to be, Lem had set out to realize his dreams of adventure and glory with the army, and he was not to be put off so easily.

Right away he'd made a friend of Corporal Jones when he tipped him off on a bad bargain in a horse deal, and Lem's dog Rabbit, too, found a friend in the corporal. So Lem and Rabbit went with the recruits south along the Hudson, proving themselves helpful in many emergencies.

The story of this trip south is full of excitement and danger, which the light-hearted Lem takes in his stride, and his encounter with horse thieves proves him brave and resourceful.

BOER, FRIEDRICH, editor. *Igloos, Yurts, and Totem Poles*. New York 14: Pantheon Books Inc. 1957. 128 pp. \$3.50. This book describes the life and customs of thirteen peoples around the globe: the Eskimos of North Canada, the Haida and Jivaro Indians, the Fuegians, the Tuaregs of the Sahara, the Nuer of the Upper Nile, the Ba-Congo People, the Bushmen of Australia, the Mbomwoms of New Guinea, the Samoans, and the Kazakh-Kirghiz and Ostyaks of Siberia.

One of the most difficult things to imagine is that, in our day and age, there are still people who live a "primitive" life, far from cities, shops, and modern facilities of transportation. They hunt and fish in order to eat, build their houses and temporary shelters with their own hands, roam in search of water and pasture for their herds. This book has boys and girls from various parts of the world tell of their life, its joys and sorrows, its rigors, and its feasts.

The editor has asked members of the Hamburg Museum of Prehistory and National History to write the texts and make the drawings which show the tools, houses, weapons, costumes, and activities of the various tribes. The lively text, written from a youngster's point of view, and the clear, accurate drawings make this book the ideal preparation for visits to museums of natural history, as well as excellent reading material for social studies.

BOLTON, G. D. *Presenting Britain*. New York 3: Longman, Green and Co., Inc. 1957. 200 pp. \$7.50. This is a book to whet the appetite of the stranger to Britain, and one to be treasured as a record of memorable visit. It is intended also for the British tourist who is exploring his own country more fully.

In sixty-four superb photographs (of which twenty-eight are in color) and some two hundred pages of text packed with descriptive detail the author has captured the spirit of the country and has provided an indispensable guide book. Scenes of outstanding natural beauty, buildings of great architectural merit, places rich in historical interest crowd the pages.

Every county in England, Scotland and Wales is dealt with in a series of 48 tours and excursions. Special emphasis has been laid upon routes for motorists and cyclists and notes are given where necessary on road conditions and accommodation.

BOYLE, M. C. *Lookout Mountain*. New York 3: David McKay Company, Inc. 1957. 223 pp. \$3. Dave O'Donovan had moved so many times it seemed to him he was always "that new kid on the block," never really at home anywhere. His parents were divorced and David sorely missed having another man around the house. When Dave's mother became ill, he went to stay with her friends,

Ruth and Don Hogan, where he met a man in the Forest Service—Don's brother Bill who became Dave's great friend.

Knowing Bill makes a lot of difference to the sensitive, moody boy, so it is with some surprise and misgiving that he learns that his best friend is to become his stepfather. After his mother marries Bill, Dave's humdrum city life changes. Once more he is on the move, this time to a glass lookout tower high atop a crag on Timber Mountain in California's last frontier country.

BROWNSTEIN, S. C. *College Bound, Planning for College and Career*. Great Neck, New York: Barron's Educational Series, Inc. 343 Great Neck Road. 1957. 228 pp. (8½" x 11") \$1.98, paper; \$3.95, cloth. A new comprehensive guide to college and career planning. The parent's and student's personal guidance counselor. Answers questions about selecting the right college, costs, gaining admission, which courses to take, how to study; evaluates all the professions in detail. Contains a table of 984 accredited colleges and universities with a description on each. A two-color map locates these schools.

CAPRON, LOUIS. *The Blue Witch*. New York 17: Henry Holt and Company, Inc. 1957. 256 pp. \$3. As David Scott finds out very quickly, Key West of the 1830's is a rough and lusty place and no spot for a thirteen-year-old landlubber from Vermont, unless he keeps his wits about him and a firm hold on his money belt.

His stepuncle, Gideon, lures Davie—and the family savings—away from the farm with tales of the excitement and riches awaiting an adventurous sailor lad on a ship in the China trade. When David arrives with the money belt around his waist, he finds all kinds of strange people more than willing to befriend him and help him find Gideon, accidentally left behind in Boston.

It is when the Blue Witch changes hands that real trouble begins, but it eventually leads to Gideon's and David's reunion—for a while—and rightful ownership is finally established after much tacking back and forth. Almost everybody seems to get his just deserts, and if some are happy about it and some unhappy, well, that's the way justice is, even now.

CHASTIAN, M. L. *Leave It to the Fripseys*. New York 17: Harcourt, Brace and Company. 1957. 187 pp. \$2.75. With next-door neighbors like the numerous high-spirited Fripseys, Marcy knew life could never be dull. But when she and her best friend Patty Fripsey discovered that Gwynn Gilson would be in their eighth-grade class that fall, they both thought the whole year would be ruined. Gwynn had been in school with them two years before, and she had been high-handed, stuck-up, and a troublemaker.

True to form, Gwynn begins the new semester by maneuvering a dancing class as a required school activity—to the disgust of the boys particularly. All she seems interested in is boys and dates, while Patty and March and the other girls and boys have always had fun together in a simpler, less sophisticated way. But they are growing up—even their mothers admit they look older this year—and so, when Gwynn invites March and Patty and their club members to a Christmas party to which they are to bring escorts, suddenly dates, dresses, hairdos, and high heels assume major importance. Only after several unexpected happenings do the girls come to realize that Gwynn, despite her seeming glamour, is lonely for friends and unhappy because she has none. At a party they give later—and a much more successful one than Gwynn's—they help Gwynn to discover she can relax and have a good time like the rest of them and make friends.

COKER, E. B. *The Big Drum*. New York 10: E. P. Dutton and Company, Inc. 1957. 315 pp. \$3.75. This sweeping historical novel has for its setting the London of Charles II, the lush island of Barbados, the lively new city of Charles Town and the great wilderness of California.

It is the story of Simon Blake, young apprentice of Christopher Wren, whose enemies force him to flee from England to a New World that is fresh and unspoiled—and dangerous. How Simon, newly arrived in Barbados, wins the loyalty and devotion of an extraordinary slave with a talent for relaying messages on a native drum; how he falls hopelessly in love with a spirited girl who is dominated by her fascinating but wicked aunt; how a series of events leads to his becoming one of the early settlers of Charles Town; and how he survives the perils of the Carolina Indian country—are related in this novel.

Collier's Encyclopedia 1957 Year Book. New York: P. F. Collier and Son Corporation. 1957. 760 pp. (7½" x 10¼"). This yearbook is a chronicle of events and achievements of the year, published as an annual supplement to *Collier's Encyclopedia*. The editors have provided a comprehensive coverage of material for all levels of public interest—local, state, national, and international. Some of the events of outstanding interest include, in the international area, the Suez crisis and the Hungarian revolt; in the national area, the election, business activities, and education; and in science, atomic energy. Over 130 articles are devoted to countries and regions of the world.. The book contains a 22-page index. It is a complete alphabetical listing of all important subjects, names, and places which are either discussed or referred to in all articles throughout the book. Also included are numerous illustrations and pictures.

COOKE, D. C. *Indians on the Warpath*. New York 16: Dodd, Mead and Company. 1957. 220 pp. \$3. The stories of ten great Indian leaders are vividly presented here, Indians who fought valiantly against the treachery and cruelty of the white man and for the protection of their own people and their lands. Included are Pontiac, organizer of the great Indian confederacy; Osceola, the famous Florida Seminole; Logan, whose eloquence was praised by Jefferson; Black Hawk, who ravaged Illinois with a handful of warriors; Weatherford, the enemy—and friend—of Andrew Jackson; King Philip of the Rhode Island wars; Little Turtle of the Miami nation; Opecancanough, the scourge of the Jamestown settlers; Wildcat, who defeated Zachary Taylor and other famous military leaders; and Tecumseh, perhaps the greatest of all Indians in war strategy, eloquence and nobility of character.

COTTRELL, LEONARD. *The Anvil of Civilization*. New York 22: New American Library of World Literature, Inc. 1957. 272 pp. 50¢. An archaeological history of the earliest Egyptians, Hittites, Sumerians, Assyrians, Babylonians, Greeks, and Jews.

CRANE, STEPHEN. *The Red Badge of Courage*. New York 16: Dodd, Mead and Company. 1957. 427 pp. \$3.25. Although the author served as a field correspondent in the war between Turkey and Greece and later went to the front in the same capacity during the Spanish-American War, it is a strange and remarkable fact that at the time this book first appeared, he had never witnessed a battle. His older brother had served in the Union Army and was especially well acquainted with the battle of Chancellorsville. Such reminiscences of this fighting as the younger Crane may have overheard, combined with his own reading about the Civil War, were the sources of his amazing feeling for men under fire. And so sensitively and realistically has Crane

drawn this picture that for more than half a century this book has continued to be read here and in other parts of the world as preeminently the veracious rather than the romantic novel of war.

Included among the stories, in addition to the main novel, are *Maggie: A Girl of the Streets*; *The Open Boat*; *The Bride Comes to Yellow Sky*; *The Monster*; *The Blue Hotel*; and *Five White Mice*. There are sixteen illustrations in sepia and a special introduction by Max J. Herzberg.

CROSSEN, K. F. *The Tortured Path*. New York 10: E. P. Dutton and Company, Inc. 1957. 186 pp. \$2.95. It was CIA Major Kim Locke's most difficult assignment. He must deliberately allow himself to be captured by the Chinese Communists, must endure every stage of brain washing so that his "confession" will be believed, and yet somehow must retain his sanity for what is to be his ultimate—a rescue.

For the Chinese were holding an Army colonel who could prove far too valuable to them, a man who had done the original work on a vital new weapon, a man who had to be taken from his captors before he could be made to reveal secrets and work for the Communists.

Kim had been tested for his vulnerability to the Chinese techniques of mental torture. But would he really hold out? Could anyone? And did he dare trust the lovely Chinese girl who wanted to help?

CZARNOMSKI, F. B., editor. *The Eloquence of Winston Churchill*. New York 22: New American Library of World Literature, Inc. 1957. 192 pp. 35¢. The pungent humor, biting insight, and profound wisdom of a great man.

DALZELL, J. R., and GILBERT TOWNSEND. *Masonry Simplified*, Volume Two. Chicago 37: American Technical Society. 1957. 438 pp. This book is a comprehensive study of masonry construction. The principles laid down in Volume I are applied to construction problems which frequently confront the mason on the job. In the same practical manner as in Volume I, the authors explain and demonstrate the elements of construction and their application to the various types of buildings now being erected.

Some of the outstanding features are: (1) quantities of carefully drawn illustrations showing construction details; (2) the latest practices in the use of concrete blocks, brick, tile and stone; (3) the experience-tested methods of handling new products such as glass blocks, water-proofing mixtures and insulating blocks; (4) trade mathematics has been reduced to simple arithmetic calculations.

The techniques underlying the design of a structure as well as the factors controlling good construction practices are emphasized in this book. In easily understood languages, these authorities have presented well-tested methods and rules that affect the quality of masonry construction.

DANIEL, W. M., compiler. *American Indians*. New York 52: The H. W. Wilson Company, 950 University Avenue. 1957. 219 pp. \$2. The status of the American Indian in the United States is a perennial subject for debate. The issues involved have been raised most recently by the retreat under the Truman Administration from the liberal and cooperative policies of the Roosevelt Administration and by the efforts made under the Eisenhower Administration to "get the Government out of the Indian Business."

The cultural background of the Indians and the history of their relations with the white men are presented in the first two sections of this book. Section III reviews their legal status in our political system. Attempts to assimilate the Indians by turning over reservation jurisdiction to the states and by

finding jobs and homes for Indian families in industrial centers are discussed in Sections IV and V. Section VI presents the programs of Indian and non-Indian groups for long-range solution of the problems involved in Indian-white relations.

DANIELL, D. S. *The Dragon and the Rose*. New York 16: Abelard-Schuman. 1957. 208 pp. \$2.75. When Carlo Rovero, apprentice to the artist Benedetto Salvi, is brusquely refused a place at the court of Count Paolo, he has no time for disappointment; within an hour he has plunged into adventure to protect the young Princess Fiorella, the Count's niece, whose life is in danger and whose Deed of Inheritance, entitling her to succeed to the estates of her family, the Abruzzi, is lost. To help her escape, Fiorella has a devoted but often imprudent retinue: Carlo himself, his fellow-apprentice Pietro, Benedetto Salvi, and his brother Iacopo—but without the protection of the mysterious King of the Troubadours, things would have been desperate for them all.

DAY, BETH. *Glacier Pilot*. New York 17: Henry Holt and Company. 1957. 348 pp. \$4.50. This is the story of how bush pilot, Bob Reeve, and his fellow flyers opened Alaska's wilderness. It was a brisk sunny day in 1932 when a thin, dark-haired young pilot, fresh from the states, crawled off a freighter at Valdez, Alaska, broke, ill, and without a plane to fly. Young pilot Reeve rustled a career for himself, against cutthroat competition, by learning to do a type of flying no one else wanted: landing his single-engine planes on the frozen faces of the glaciers high in the wild Chugach Mountains where the gold mines lay, to become known as "the greatest rough-terrain pilot of our continent," and the only pilot to be under exclusive contract to the military during World War II. Alaska's first glacier pilot, Bob Reeve, also pioneered the original mail route over the Andes, and was the only civilian flying combat zone during World War II. Today, Reeve is running a scheduled airline through "the world's worst weather" along the fog-shrouded Aleutian Chain.

This is the story of American aviation; its meteoric rise from Jenny to Jet flying within the short space of a man's lifetime. It is also the story of Reeve's friends (and some of his enemies): that salty, competitive bunch of bush pilots who pioneered Alaska's skies in their single engine ships without communications, airfields, or navigational aids. Fellows, who, as a younger pilot remarked, "would cut each other's throat for a fare, but flocked like doves when a guy was lost."

DEXTER, HARRY and RAYMOND TOBIN. *Pocket Encyclopedia of Music*. New York 16: Philosophical Library. 1957. 160 pp. \$2.75. Here, in easily accessible form, are all the basic facts necessary to understanding the world's great music. A description of the most famous symphonies, concertos, operas and tone poems. Biographical facts about the great composers and interpreters. Identification and history of the musical instruments. A clear and simple analysis of musical forms. Music especially composed for films, ballet and theatre. And many odd and curious facts, such as composers celebrated for a single work, compositions with unusual orchestration, works with peculiar titles, etc.

DONOHUE, J. K. . . . *Baffling Eyes of Youth*. New York 7: Association Press. 1957. 251 pp. \$3.50. This is the \$1,500 award-winning Leadership Book in the Association Press contest because it is an enthralling first-of-its-kind life story of a gang of delinquent boys who lived in one of our typical big cities

(St. Paul, Minn.), of how a probation officer working with them as a volunteer, saw their promise, of how he found ways to win their confidence and helped many grow to social maturity—using many resources of his community. It is a sociological study, a documentary, case-history account of delinquent gang formation and treatment, and of the social influences on individual and group personalities. It is a guide for the professional and volunteer youth worker who will find here a full 25-year study of a delinquent gang (the Ramsey Midgents)—introduction to the gang, patterns of work with the gang, and appraisal of this work as gang members reached adulthood.

Much has been written concerning the culture of such gangs, their mores, colorful language, and special sets of values. But . . . *Baffling Eyes of Youth* delves far more deeply to the core of delinquency—reflecting the constant inter-action between individuals and their groups, and the limits to which gangs can be directed in opposition to the standards of their peers outside the gang.

DORIAN, EDITH, and W. N. WILSON. *Hokahey!* New York 36: Whittlesey House, McGraw-Hill Book Company. 1957. 112 pp. \$3.25. Here is the story of American Indians from earliest times right up to the present. These brief, highly colorful chapters are packed with fascinating details about the Indians' probable origin, their migrations, languages, history, culture, and—perhaps most interesting of all—their influence on our place names, our roads, our food, indeed, our democracy itself.

There is a full section on each of the seven great culture areas: Eastern Woodlands, Southeastern, Southwestern, Plains, Plateau, California, and Northwest. And each section carries an account of the major characteristics of each group—their hunting, farming, housing, arts, societies, and great leaders—together with charts showing these characteristics and many dramatic pictures for easy reference.

EIFERT, V. S. *Mississippi Calling*. New York 16: Dodd, Mead and Company. 1957. 267 pp. \$3.50. While mammoths still ranged its shores, ancient hunters camped beside the river. Years later, the Mississippi people were building a pyramid to the sun. They, too, were gone when De Soto, the Spanish conqueror, was in turn conquered by an implacable, tremendous river.

There came Joliet and Marquette, paddling canoes in search of the mouth; La Salle losing the Mississippi and Iberville finding it again; John Law, the promotor, and Lafitte, the pirate; John Audobon, the bird painter, and Henry Shreve, the steamboat builder; Zebulon Pike, who missed the source, and Henry Schoolcraft, who found it; Black Hawk, the warmaker, in the North; and Andrew Jackson, the peacemaker, in the South.

Meanwhile towns are built; strange campaigns of the War Between the States are fought for possession of a river which could never belong to any man. There are flatboats and keelboats; steamboats and towboats. And the U. S. Corps of Engineers and the Coast Guard come to begin a lifetime task of taming the river.

ENRIGHT, ELIZABETH. *Gone-Away Lake*. New York 17: Harcourt, Brace and Company. 1957. 192 pp \$3. The first discovery that Julian and his cousin Portia made in the woods around their new summer home was the great rock with the Latin inscription: "Lapis Philosophorum, Tarquin et Pindar, 15 July 1891." The second was the swampy expanse that had once been a lake and was bordered by old and formerly elegant summer houses.

The third, and by far the best discovery, was that two fascinating people lived in these apparently deserted houses.

Minnehaha Augusta Cheever and her brother Pindar Peregrine Payton had retired to this spot where long ago they had spent childhood summers. They remembered Lake Tarrigo when it had been filled with sparkling water and children raced through the elaborately named houses. Then the water had suddenly disappeared, and gradually the houses with all their furnishings had been locked up and left.

For a long while Portia and Julian kept their fascinating discoveries to themselves, spending wonderful days exploring the old houses and hearing glorious stories of bygone times. Then one momentous day Foster, Portia's small brother, trailed them and floundered into the Gulper, the swamp's dangerous quicksand. By the time he had been rescued, Gone-Away Lake was no longer a secret. The special world, now shared, proved even more joyous. And at last, the vine-entangled Villa Caprice, forgotten for fifty years, revealed its remarkable secrets.

ERICKSON, G. A. *Warden Ragen of Joliet*. New York 10: E. P. Dutton and Company, Inc. 1957. 248 pp. \$3.95. Loeb was murdered and Leopold became a model inmate—in Stateville-Joliet. It's a dual prison setup out of which Roger (The Terrible) Touhy shot his way—only to be recaptured. It holds Basil (The Owl) Banghart, one time Public Enemy Number One. The two great, grey-walled piles harbor 4500 of the toughest criminals. This book tells the dramatic and fascinating story of these two maximum security prisons—and how Joseph E. Ragen tames the human jungles behind walls. It also includes unprecedented and uncensored statements from Banghart, Touhy and Leopold and inside, never-before-told stories about prison life.

When Joseph Ragen took over as warden in 1935, discipline was so lax that half the prisoners carried deadly weapons; gambling and immorality flourished in tar paper shacks which littered the grounds; money circulated freely and gangs terrorized prisoners and guards alike. It took a man of courage, principle, tenacity and intelligence to remold Stateville-Joliet into a disciplined and secure penal institution—a place administered with impartial justice and firm rules, where prisoners are kept too busy to plan escapes and where the most incorrigible inmate has respect for the man in charge.

How this was done, the kind of man who achieved it, and the colorful and dangerous criminals he dealt with in the process is the story contained in this exciting book.

FAIRFIELD, LETITIA. *Epilepsy*. New York 16: Philosophical Library. 1957. 159 pp. \$4.75. Mysterious in origin and distressing in its effects, epilepsy makes great demands on the sympathy, patience and tact of those near and dear to the sufferer. This summarizes for the public what is known about the various forms of the disease, what treatments are available, what special problems are presented by epilepsy in children, and what employments the epileptic can expect to find for himself in the workaday world. To assist doctors and social workers, the author has included a short questionnaire on epilepsy, which answers simply and directly those questions which she has most frequently been asked by those new to the disease.

FARMER, P. J. *The Green Odyssey*. New York 3: Ballantine Books. 1957. 152 pp. Hardbound, \$2.75, paperbound, 35¢. A science-fiction adventure.

FAULKNER, WILLIAM. *The Town*. New York 22: Random House, Inc. 1957. 378 pp. \$3.95. In the over-all design of the trilogy devoted to the origin,

rise and dominance of the Snopes family, this is the second novel. Its predecessor is *The Hamlet*. Its successor, *The Mansion*, will ultimately conclude the chronicle of the Snopeses, who took root in Yoknapatawpha County and proliferated through and beyond it until they out-manuevered and overpowered a society and a culture that had little defense against their invincible rapacity.

By returning to the town of Jefferson, the author is home again in the world that he brought into being and peopled with the population of his imagination. There are the irrepressible tribe of Snopes, the natively wise V. K. Ratcliff, the family Mallison, Lawyer Gavin Stevens, the De Spains, the Varners, and two women, Eula and Linda, who take a prominent place in the memorable and variegated gallery of characters created by the 1950 Nobel laureate in literature.

The Town, by itself, is a distinct entity; as the second part of the Snopes triptych, it is a unit, conceived and executed in an undertaking that, in its entirety, will be considered an impressive addition to the slowly growing list of distinguished American novels.

FINDLAY, B. A. and E. B. *See What You Say*, 2nd edition. New York 11: Prentice-Hall, Inc. 1957. 429 pp. \$2.96. This text has been prepared to assist the student to express himself correctly. The presentation is such that he does not need to study the materials in the order in which they appear. The book is divided into six parts. Included is a study of spelling, nouns, pronouns, verbs, adjectives, adverbs, prepositions, etc.—all the different parts of speech. Then the student's attention is also pointed to the choice and meaning of words, punctuation, and, finally, expressing one's ideas in words effectively in written and spoken form. Pictures included are designed to be helpful as well as entertaining.

FISHER, AILEEN. *A Lantern in the Window*. New York 17: Thomas Nelson and Sons. 1957. 127 pp. \$2.75. "I'm going to get a job on a river boat some day. Nothing exciting ever happens on a farm," Peter declared.

Of course, Uncle Eb's farm was right on the Ohio River and that helped, because Peter could see the paddle boats as they passed. But there would be a lot of hard work for a twelve-year-old-boy to do, and Uncle Eb and Aunt Ellie were quiet, elderly Quakers. Things wouldn't be very lively that summer.

But Peter was mistaken, for the strangest things began to happen the very day he left home. Why had people along the way collected old clothes and money for his uncle? What did Aunt Ellie mean when she spoke of the skiff to be towed across the river? And what about the lantern in the window, that made more work when it was lighted? Who was the stranger who didn't "know two pennies about Quaker talk"? Betsy Chase said he was a spy, but she only laughed at Peter's questions. However, she'd give him a hint: it was in the preamble to the Constitution. But Peter couldn't remember the preamble.

His curiosity led him to do some investigating and while he was still putting two and two together, he skipped out one night to watch for a steamboat on the river. Then he saw and heard something—and in a flash all the mysterious happenings had meaning. The next morning he proved to his uncle that he could be trusted with the secret he had discovered. And Betsy proved to Peter that helping people on their way to freedom was more exciting than anything that could happen on a river boat.

FLENDER, HAROLD. *Paris Blues*. New York 3: Ballantine Books. 1957. 187 pp. Hardbound, \$3; paperbound, 35¢. The story of an American Negro in France.

FOLEY, CHARLES. *Commando Extraordinary*. New York 3: Ballantine Books. 1957. 180 pp. 35¢. The exploits of Otto Skorzeny.

FOOTE, SHELBY, editor. *The Night Before Chancellors—Ville and Other Civil War Stories*. New York 22: New American Library of World Literature, Inc. 1957. 192 pp. 35¢. The momentous drama of the war between the states.

FREETHY, V. F. *Assignment in Danger*. New York 3: David McKay Company, Inc. 1957. 188 pp. \$2.75. Franz Gruber, a teen-age Czechoslovakian refugee, is sent to East Berlin as part of an American espionage ring. He stays at the house of the Eschbaum family (a widow, and a boy and girl about his own age) and discovers that they are ardent Communists.

Franz's part in the espionage is a small but dangerous one. He must transport a vital roll of microfilm from one agent to another. After he receives the film, the organization is broken; fearing capture, Franz hides the film in a mass of ruins a few blocks away from the Eschbaum house. He then tries to contact a member of the spy ring, but because of his inexperience—and carelessness—he betrays himself and is captured.

After enduring some torture, Franz agrees to lead his captors to the film's hiding place. He manages to outwit them, escapes into the vast pile of ruins, gets the film, and flees towards West Berlin. But ill luck is still with him: the film is stolen by a man who has no knowledge of its value. The story ends on a note of high excitement as the desperate young agent recovers the film and finally completes his mission.

FRIEND, J. N. *Words: Tricks and Traditions*. New York 17: Charles Scribner's Sons. 1957. 192 pp. \$3.95. "Words, words, words," said Hamlet, but he left it at that. The author goes further and gives us in this book many amusing aspects of language—alliteration, repetition, names, nicknames, proverbs, boners, and even some limericks and other rhymes. This book is not a serious study of derivations or semantics but one purely for entertainment, and in addition to curious bits of word lore, there are tricks and word puzzles of several kinds—anagrams, palindromes, word squares, cryptograms, rebuses, and some unusual crossword puzzles. Anyone who enjoys his daily crossword in the newspaper or any of the other popular word games will find much to intrigue him.

GIBSON, C. M., and I. A. RICHARDS. *First Steps in Reading English*. New York 20: Pocket Books Inc. 1957. 164 pp. \$.35. This book is designed to help anyone who speaks even a little English learn to read it quickly and easily. In the proven method which is used, material is presented in an ordered and controlled fashion. It starts with simple statements of pictured fact written with only seven letters. Up to page seventy it uses only half the alphabet, by which means great stress is placed on familiarization with all 26 letters.

GOLDEN, G. M. *The American Indian, Then and Now*. San Antonio 6, Texas: The Naylor Company. 1957. 84 pp. \$2.50. The author gives us swift, panoramic looks at the Incas, the Mayas and the Aztecs, and the view is impressive. She shows us how much was lost and trampled underfoot by the ruthless conquering Spaniards. Much of the loss was irreparable. For the Indians in the present confines of the United States, the situation was grimmer. For

hundreds of years everything was taken away, and nothing given back. That the Indian could survive at all is a tribute to both his physical and mental stamina.

GOODIN, PEGGY. *Dede O'Shea*. New York 10: E. P. Dutton and Company, Inc. 1957. 187 pp. \$3.50. A heartwarming story of a very real girl whose yearnings to express herself and make her mark on the world will be recognized by everyone who is, or ever has been, eleven years old. Dede throws stones, imagines spooks under the bed, likes cream cheese and jelly sandwiches (with a side dish of baked beans) for breakfast, longs to be fourteen and have a figure. She is, in fact, a Penrod—in shorts and pigtails.

Her sister Pat is fourteen—and, quite unfairly, is permitted lipstick, dances, and is interested in boys. These inequities rankle and Dede sets herself to right them . . . with results disastrous to all, and finally to Dede. The 80-year-old principal of the school is shattered to find himself conducting the prodigy around the dance floor in a sophisticated cocktail dress (but still with the pigtails). Pat is appalled to discover she has played her first tender love scene under Dede's scornful eye. And her long-suffering mother and father take a very dim view of Dede's solutions to her financial problems.

GOODMAN, K. E., and W. L. MOORE. *Today's Economics*. Boston 17: Ginn and Company. 1957. 640 pp. \$3.96. The Council for the Advancement of Secondary Education has defined the essential equipment for economic literacy as (1) an understanding of basic economic areas and topics, (2) the ability to read with comprehension and to become familiar with everyday economic terms used in newspaper and magazine articles, and (3) the acquisition of information and skill sufficient to carry out efficiently and wisely the practical everyday economic and civic responsibilities of American citizens. The development of these important competencies is the major purpose of *Today's Economics*.

Today's Economics gives the student a thorough treatment of the basic subject matter of economics. This it does by a direct, simple, lively presentation in which economic principles are explained by tying them to the practical daily experience of living and working in America today. The text develops the essential concepts of practical economics without resorting to "gobbledegook." At the same time it gives the students a solid working vocabulary of economic terms.

The authors have taken special care to present the sound economic principles set forth in this book simply and clearly and to apply them in realistic, understandable situations which make them come alive for high-school boys and girls. From his study of this book a student should acquire the information and develop the ability needed to apply problem-solving methods to economic matters in his daily life. He should improve his civic understanding and his ability to think constructively about the economic problems of his government. He should become a more intelligent consumer through the practical assistance given him in such matters as wise buying, insurance, and taxes. The authors are aware of the urgent need for instilling in students a thorough appreciation of our American way of life firmly based upon an understanding of it. They have not failed to commend as well as explain our economic system.

The book is divided into nine units and thirty-one chapters. Each chapter opens with a short paragraph which raises stimulating questions bearing on the topic to be discussed. Both teacher and students will find the numbered topic headings within each chapter a convenience. Numerous teaching devices

and learning aids are a feature of the text. These include specially prepared "Study helps," drawings, cartoons, graphs, charts, and photographs. Each chapter concludes with a statement of the highlights headed "Some important ideas to review." Then follows a wealth of exercise of self-testing material. Testing yourself on words checks understanding of important economic terms in the chapter. Testing yourself on ideas and facts probes understanding of economic facts and principles. Testing yourself on the chapter tests reading and comprehension. Finally, discussion topics and problems and reports, projects, and things to do provide thought-provoking and problem-solving situations which require students to apply economic facts and principles. A self-checking cumulative review test follows each of the nine units.

A teachers' manual, a workbook entitled *Studying Today's Economics*, and a series of tests have been prepared to accompany the text.

HALL, DAVID, and ABNER LEVIN. *The Disc Book*. New York 19: Long Player Publications, Inc. Box 346. 1955. 536 pp. \$7.50. This book covers the field of long-playing records of concert music in terms of the major realms of interest displayed by today's disc collectors. Within the limits imposed by reasonable length and moderate price, it seeks to bring a semblance of order into the vast concert music literature recorded on long-playing records, so that the beginning collector, as well as the seasoned buyer, can build his record library with greater ease. The authors have combined their vast knowledge and practical experience and have produced a comprehensive, informative, practical, and readable one-volume guide for the concert music record buyer. Herein are discussions of recorded sound, of the American record industry, of the major recording artists of today and yesterday, and of the living musical repertoire from earliest times to the present. The listings under the various headings include the most representative and significant discs available in long-play format in terms of superior sound quality, distinguished performance, and importance as music.

HALL, RICHARD; E. P. BEITLER; and F. C. STIFLER. *How To Read the Bible*. Philadelphia 5: J. B. Lippincott Company. 1957. 255 pp. \$2.95. The Bible is not like other books, to be read from beginning to end. It is a library of 66 different books. And, as you learn to browse around, you will discover that you can suit your reading to your mood. The Bible is full of biographies, stories of adventure and romance, war and intrigue, struggle and achievement. The Psalms contain some of the most beautiful poetry ever written. The Proverbs are a challenge to our modern columnists. But, most important, the Bible is a constant source of inspiration, comfort and guidance.

This book is written primarily for the person who is turning to the Bible for the first time, or who has grown discouraged by a more conventional approach to a projected program of regular Bible reading.

This book will acquaint you with the treasures to be found in the Bible and will help you discover new paths to happiness and contentment.

HAMBLETON, JACK. *Wings Over Labrador*. New York 3: Longmans, Green and Company, Inc. 1957. 168 pp. When the noted geologist, Dr. James Reid, chartered his airplane, Bill Hanson was told nothing of the purpose of the trip. He had a pretty shrewd idea, however, that Dr. Reid's interest was in iron ore; and he turned out to be right. The vast iron deposits in Minnesota's Mesabi Range would not last forever, and mining interests were looking for new sources. Preliminary surveys indicated that Labrador was a likely place, and it was the geologist's job to locate deposits there if possible.

The search was successful. At Burnt Creek, they found a stream that ran red with iron, and the whole district turned out to be rich in ore. Dr. Reid's report and the analysis of the samples he submitted set in motion a project vaster than anything Bill had ever seen—so vast that it took him some time to get used to the size of it.

To bring the iron to the docks, a railroad had to be built through some of the roughest country on the continent, where no white man had ever set foot. The necessary men and equipment had to be brought into the territory by air, and to do this one of the largest civilian airlifts ever organized was put into operation. Running the airlift was Bill Hanson's job. The magnitude of it staggered him at first, but he buckled down to work and put everything he had into it. To help him out he called in his old friend, René Fortune.

HEUER, KENNETH. *The Next Fifty Billion Years*. New York 22: The Viking Press. 1957. 144 pp. \$3. The future is a vast land, wider than the vision and without an end. In this book, the author explores 50 billion years of the time yet to come, basing his observations of the earth and of the universe upon modern theories of astronomy and physics.

He sees 2000 A.D. (providing that atomic energy is turned to peaceful purposes) as a place where jet-propelled planes fly non-stop around the earth's equator in 24 hours—keeping pace with the sun's progress in the sky; where automobiles travel for a whole year on a pellet of atomic energy the size of a green pea; where artificial suns mounted on steel towers provide sunshine at any given time for parks and beaches.

Fifty billion A.D. is a strange country, where the month is equal to the day. Traveling through this new land, the author finds that the day and the month are equal to 47 of our present days ("there will be long scorching days and long frigid nights") and that the moon, appearing smaller and fainter in the sky, is 340,000 miles away—100,000 miles farther from the earth than it was in the twentieth century!

These are only a few of the numerous glimpses into the future given in this book, which is also an actuarial report on the life expectancy of the earth, and which was described, when it originally appeared, as "an eloquent plea for peace." Since the book's first appearance, it has been published in England and in Italy, and it is now being reissued in this new, revised edition, embodying the latest scientific information.

HOFMANN, J. E. *The History of Mathematics*. New York 16: Philosophical Library. 1957. 144 pp. \$4.75. An unusually sensitive account of the growth of mathematical techniques from prehistoric times to the advent of the modern era. Against a broad background of Man's advancing civilization, the author connects the progress of mathematics with the rise of intellectual attitudes and increasingly complex practical demands. In a wealth of detail he explores the numbers systems and methods of ancient peoples, the role of the great translators of the Middle Ages, and the problems and tensions of the Scholastic period. Numerous works of the Renaissance and Early Baroque mathematicians are discussed, emphasizing developments which helped to pave the way for modern concepts.

HOLT, SOL, and H. L. McCracken. *Economics and You*. New York 17: Charles Scribner's Sons. 1956. 560 pp. \$3.68. Confronted by the challenge of a totalitarian society, our system must be understood by the youth who will inherit it if we expect them to defend it. The issue is no longer a clash of academic principles and obscure generalities but one of pressing and immediate

concern to all who live by and under the free American system. For the achievement of this fundamental understanding this book was planned and written.

Much time and effort have been expended to make this book interesting and intelligible to young people. To that end every subject and almost every paragraph begins with some interesting point of contact with which students are familiar, whether it be baseball, television, the school lunchroom, or the neighborhood in which they live. The illustrations have also been selected with this objective in mind. Thus students are led from the known to the unknown, from the familiar to the unfamiliar, from the experiences of youth to the realities of adulthood.

To assist teachers in planning lessons and to help students in obtaining mastery of the subject, a number of class-tested teaching devices have been included. At the end of each chapter there will be found a short informational quiz and a group of questions that require thinking about, rather than recall of, subject matter. A number of current topics suitable for forums, debates, and reports and a brief bibliography of suitable references are also included. Furthermore, an activity problem has been mapped out at the end of each chapter. It will be noted that these problems require all types of student activity including interviewing, measuring, observing, recording, visiting, and constructing as well as reading. The author's purpose has not been to make research scholars or financial wizards of students but rather to make them economically literate so that they may understand the business and industrial system under which they live.

Additional learning aids for the teacher and students include an annotated list of novels based on economic ideas, a feature called "How It Began" which describes the interesting origin of many economic terms, a suggested program of sound films to provide visual enrichment of the subject, and an extensive glossary of important economic terms.

It hardly needs to be pointed out that a person who cannot interpret a cartoon, a simple graph, or a chart cannot read a newspaper intelligently today. To provide training in these skills a special section called "Developing Additional Skills in Economics" has been added to the end of the book.

HORNUNG, W. J. *Mechanical Drafting*. New York 11: Prentice-Hall, Inc. 1957. 254 pp. (8½" x 11"). \$4.75. Particular stress has been placed in this book on the manner in which the material has been presented. The beginning draftsman is not only trained in executing the drawings but is made aware of the sequence in which a drawing should be prepared. Correct drawing procedures, designed to save many hours of tedious work, require a thorough knowledge of conventions and standards common to modern drafting practice. Such conventions and standards form an important part of this book's subject matter.

Practical application of drawing techniques is presented in the form of drawing projects, or plates, supported by a descriptive procedure for preparing the drawings. Prior to each drawing plate, text material, profusely illustrated, prepares the student for the assigned project. Each drawing plate, or work problem, is followed by an examination, with which the student can test his knowledge of the subject. When time permits, or when extra practice is desired by the student, additional problems after each examination may be worked out.

The author is aware of the problems of the instructor who finds himself answering repeat questions, making his task less interesting and thereby

destroying the motivating qualities he must possess in order to impart good instruction. The student who finds himself answering his own questions and able to solve his own problems is, by far, more interested in his work and will produce better results. The stronger the student's motivation, created by the instructor or by the book, the more efficient will be the learning process. Research has shown that efficiency of learning is closely related to the meaningfulness of the material presented in terms of the student's interests and purposes. One objective of this book is to give the student the opportunity to assist himself, create and motivate his own interests in his work, with a minimum amount of supervision.

JACKSON, J. H. *The World in the Postwar Decade*. Boston 7: Houghton Mifflin Company. 1957. 256 pp. \$3. This book is an attempt to make current history intelligible to the ordinary newspaper reader. Now that the press and the radio are devoting more attention to foreign affairs than ever before, most of us are surfeited with information and less than ever able to see the wood for the trees and to set the history of our own time into perspective and proportion. To understand what has been happening we must have an outline, a simply written narrative of the postwar years. That is what this book provides.

They have been years of fantastic upheaval. The wartime alliance between the Soviet Union and the great Western Powers broke down (how and why?) and was followed by an armaments race and a cold war. Europe came to be partitioned along lines that were neither hard nor fast and with consequences in a dozen countries which no one could have foreseen. Meanwhile, the world outside North America and Europe was in the throes of a complicated revolution. In China and Southeast Asia the postwar years saw changes more significant than had taken place in any other decade of their history. In Africa there was an awakening which turned the eyes of the world at last to that continent. Hardly less important were developments in the Arab countries, particularly in Palestine, Egypt, and French North Africa.

JOHNSON, E. H. *Kenny*. New York 17: Henry Holt and Company, Inc. 1957. 190 pp. \$3. Eleven-year-old Kenny, the son of an American Negro engineer sent to Uganda on a special project, understands that he is returning to the land of his ancestors.

Kenny is rather puzzled and dismayed when, on his arrival in Africa, he feels a foreigner in a foreign land and finds he has much more in common with Howard, another American, than with Akeke, a native boy. However, he approaches his new life with enthusiasm: he visits the market place and nearby villages, sees a king's impressive recrowning ceremony (mpango), and has a hair-raising adventure with Akeke and Howard when they all get lost in the forest, watch an elephant hunt, and have to spend a night in a Pygmy village.

Gradually, as Kenny's knowledge of a different way of life and culture broadens, he finds that sympathetic understanding and a genuine desire to be friendly can bridge any differences there may be between people of different color and background, anywhere in the world.

JOHNSON, G. B.; W. R. JOHNSON; and J. H. HUMPHREY. *Your Career in Physical Education*. New York 16: Harper and Brothers. 1957. 287 pp. \$3.50. This book for young men and women interested in a career in the field of physical education, tells the student the opportunities in the field and what he will have to study to prepare himself for such a career. The text is designed for an introduction to a physical education course for freshman and sophomore classes in college—to introduce both male and female students to the

purposes, requirements, scope, and opportunities of physical education as a career. Part I is concerned with the meaning and values of physical education, Part II discusses the nature and purposes of professional and general educational preparation and is an introduction to the actual job ahead, and Part III deals with the closely related fields of health education and recreation.

KAYE, M. M. *Shadow of the Moon*. New York 18: Julian Messner, Inc. 1957. 351 pp. \$3.95. The black year—a turbulent and fearful time, just one hundred years ago, when all castes fought to overthrow British rule and all India was drenched in blood—is the background for this unusual novel. The author recreates here the vast drama of the Indian Sepoy Mutiny of 1857 through the personal drama of two people who find love in a land threatened by tyranny and destruction.

Captain Alex Randall of the East India Company had felt the tremors of rebellion, even before he left England to escort Winter de Ballasteros to India for her marriage to Conway Barton, Commissioner of Lunjore, which had been arranged by her grandfather before his death. Alex knew that India was no place for a sheltered girl of seventeen and that Conway Barton, a man three times her age, steeped in drugs and alcohol and greedy to possess her fortune, was no husband for Winter.

KENNY, S. M. *Half the World's Children*. New York 7: Association Press. 1957. 254 pp. \$3.50. You learn, through the alert eyes of UNICEF's Asia Regional Director how 22 million children and their mothers were helped—often kept alive—by emergency food rations, medical treatments and the setting up of maternal and child welfare centers—of the local and international doctors, nurses and other specialists who performed this Herculean task.

For the most part, the villagers of Asia tell their own story, in their own salty way. "Government aid often scratches us where we don't itch," is a typical example of how these courageous people meet their desperate plight—with laughter and fortitude. As Virginia Kirkus says, "The facts are all there but there are faces too—along with informal notations on people, homes, holidays, customs, etc." Anecdotes, interviews, colorful portraits of local leaders preserve in this unusual diary the vivid immediacy of life as it happened with all the pathos and humor of the moment. The human factor rather than the cold statistic is always stressed as the author describes the growth from a period in 1950 of no relief from abject suffering, to the establishment today of some 125 active projects.

The locale encompassing this tremendous effort is an area where nearly 40% of all UNICEF's work in the world is concentrated—an area where one-half the world's children live—ranging from Korea and Japan on the east to Pakistan and Afghanistan on the west; and in the south from Muldave Islands to the Fiji Islands in the Pacific.

KILANDER, H. F. *Health for Modern Living*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. 1957. 514 pp. \$4.95. This book has been written to help the young people of our country to attain three of the objectives of general education, as reported in 1948 by the President's Commission on Higher Education: (1) Attain a satisfactory emotional and social adjustment; (2) Maintain and improve their own health, and cooperate in solving community health problems; and (3) Train for the responsibilities of family life and citizenship.

The major points of emphasis in this book conform closely to the recommendations of the National Conference on College Health held in Washington,

D. C., in January 1956. These points are: (1) personality development and mental and emotional adjustment; (2) looking toward marriage and parenthood; (3) nutrition as related to meal planning and reducing; (4) the daily schedule of work, sleep, rest, and recreation; (5) the new emphasis on consumer health, including the periodic examination and group insurance plans; and (6) careers in the 150 health fields.

Each major topic is presented in light of the college student's current health needs and of his needs after leaving college. Every informed citizen must be able to relate information from the broad field of health to the specific health problems that spring from his own profession or vocation, from his responsibilities as a marriage partner and parent, and from his obligations to the community in which he lives. This book seeks to lay a valid foundation of knowledge about health that will help students lead sane, productive lives now and in the years that lie ahead.

High schools throughout the country are offering increasingly comprehensive programs in health education covering many of the topics that were once presented in college courses. Instead of going back over all this familiar ground, this book concentrates on health problems that tend to grow in importance as the individual matures and establishes a home of his own. Many of these problems concern personal and interpersonal adjustment.

KING, D. R. *Spitzee Anota*. New York 3: Longmans, Green and Company, Inc. 1957. 252 pp. Here's an exciting sequel to *Sukanabi*, the author's story of fur traders and Indians.

Reunited with his family in Fort Edmonton, young Ted MacDonnell quickly makes a name for himself as a hunter and rifle shot. But he does not stay long in the fort. His father plans to return as a settler to the Spitzee Anota—the country around the Spitzee River—where once he traded with the Indians; and Ted goes ahead to reconnoitre. Whiskey traders had aroused the bitter enmity of the natives, and it is necessary to make sure that the danger has subsided before entering the district as settlers.

Sheltering for the night in the crevice of a huge cleft stone, Ted is startled to discover, by the light of morning, Indian pictures that indicate that this is one of their sacred places. Hastily he prepares to leave; but before he can get away, a party of Blackfeet captures him.

For some time Ted lives with the Blackfeet, until the band is raided at night by enemies and he makes his escape, though without his beloved rifle. Throughout the winter he lives in the mountains, and the experience he gained during his previous life in the wilderness stands him in good stead. In the spring he makes his way again to Fort Edmonton.

Ted and his father, accompanied by their old French-Canadian friend, René Corteau, now carry out their plan to build a cabin in the Spitzee country. When it is completed, Ted feels the urge to go exploring for a day or two, and perhaps find his friend White Calf.

Again fate interferes with his plans; a prairie fire springs up and he barely escapes with his life. Weak and exhausted, he is found by White Calf and nursed back to strength. For some months he lives with his Indian friends, sharing their good fortune and bad. Then he leaves them to go back to his own people.

On the way, he discovers that the whiskey traders have come back. When he joins his father and Corteau and tells them, he learns that a new factor has entered the life of the country—the Mounted Police. The three men locate the

camp of the traders, and while the elder MacDonnell goes for the police, Ted and Couteau stampede the renegades' horses to keep them from leaving.

The story ends with the arrest of the whiskey traders by the Mounties. Law has come to Assiniboia at last.

KOLLER, LARRY. *Camping and the Outdoors*. New York 22: Random House, Inc. 1957. 128 pp. \$2.95. This book is for the man who feels the call of the outdoors and has a yen for a steak sizzling over a campfire; for the woman who longs to escape household routine, who seeks relaxation and the beauty only nature can give; and for the kids, who grow best out of doors. In easy-to-follow words and step-by-step pictures, the author explains every phase of camping activity—such basics as selecting the right tent, tent raising, safety and first aid, use of the ax and knife, what to take along, campfires and cooking, the use of cameras and binoculars. Finally, there are two special features—Understanding Nature and Camp Sites Across the Nation, a listing of more than 200 camp grounds that is bound to include at least one site near your home.

KROEBER, ELSEBETH; W. H. WOLFF; and R. L. WEAVER. *Biology*. Boston 16: D. C. Heath and Company. 1957. 616 pp. \$4.68. To help the teacher stimulate an interest in outdoor biology, field trips have been described. These are grouped into one section at the front of the book for ready reference. If pupils can be made to feel the need for studying some biology out-of-doors, they will be better prepared for the last unit, Conservation. So that pupils may be ready in interest and understanding for this important topic, it is placed at the end of the book; but references to ecology and conservation are made again and again in the earlier units. No pupil should be permitted to complete his biology course without help in developing an interest in conservation and an appreciation of its importance.

In the experience of many teachers the objective of developing scientific attitudes and habits is best achieved if the subject is not didactically presented and belabored. The text and exercises, therefore, have been carefully written to incorporate consistently the scientific attitude of mind and scientific methods of arriving at conclusions. There is no chapter on scientific attitudes and scientific methods.

Great care has been taken, also, to achieve simplicity of expression. Difficult science words have been excluded; only the essential technical terms have been included and these have been listed at the end of the chapter to help the pupil master them. The glossary at the end of the book is designed to assist the student further. Much thought and labor has also been expended to avoid abrupt transitions from idea to idea. The treatment of content carries the student forward gradually from each sentence and idea to the next.

Because illustrations are almost if not just as important as words in developing ideas and teaching facts, they have been made an integral part of the text. Nearly all illustrations are referred to, and their legends often ask pertinent questions. Many of the illustrations may be used as a basis for questions and exercises.

End-of-chapter materials were designed to be of maximum help to both the teacher and pupil. Here are: (1) a series of questions which will indicate to the pupil whether or not he has achieved an understanding of the subject, not merely the memorization of the words of the book; (2) a minimal list of technical terms essential for discussion of the topic and further reading; (3) a small number of exercises or experiments which can be easily carried out by

all pupils (The *Teacher's Manual* includes further suggestions for exercises for those teachers who have the time and necessary equipment for further experimentation); and (4) a short bibliography. Aside from an occasional reference work only books and articles of proved interest to the pupil have been included.

An appendix, consisting of details of a number of type forms, will be useful to pupils who are preparing for college entrance examinations. Others, also, will find this section useful.

A *Teacher's Manual* which accompanies the textbook includes in some detail aims and methods in teaching biology.

KYLE, ELISABETH. *The Seven Sapphires*. New York 17: Thomas Nelson and Sons. 1957. 224 pp. \$2.75. "Hey, Scotty," the boy on the bicycle called to Walter. Then he laughed mockingly. It seemed people down here didn't wear the kilt.

Walter was feeling self-conscious about his Highland clothes, and forlorn too, as he sat in the garden of Carisbrooke Square his first morning in London. Bob, his host, had gone to the dentist, and the girls were out shopping. That was why Walter was alone. And that is how he happened to meet Winkle who told him about the disappearance of the seven sapphires. If Winkle could find the jewels, his life would be greatly changed—and for the better—he told the boy from Scotland.

LAMBERT, JANET. *The Precious Days*. New York 10: E. P. Dutton and Company. 1957. 192 pp. \$2.75. In the precious days that follow her unpromising first meeting with Jay, Sandra is introduced to the gay turbulence of interests and activities normal for her age. She sees with new clarity and appreciation the value of the life she has abhorred with her brilliant, eccentrically unconventional parents, living aboard the Chinese junk Pakhoi and traveling from port to port. Her love for her parents, her lively, adaptable brother Tenny and her sympathetic, sensible younger sister Josie has been obscured by her own resentment and the feeling of guilt that went with it. Now her life takes on new meaning, as Jay shows her family to her through his eyes and those of his friends.

It is on the last of these precious days, during a noisy, rollicking party aboard the Pakhoi that Sandra realizes the amazing results of no longer trying to pretend to be anyone but Sandra Campbell.

LEE, C. G., JR., *Lee Chronicle*. New York 3: New York University Press. 1957. 431 pp. \$6.50. This book, compiled and edited by Dorothy M. Parker, portrays the outstanding men of the early generations of the Lee family of Virginia against the background of their times. It deals in particular with the first Richard Lee, who emigrated to Virginia in 1640; his grandson, Thomas Lee, Governor of Virginia and builder of the family home, Stratford; and with two of Thomas' famous sons, Richard Henry Lee and William Lee. Other members of the family, remarkable men and women of their day, also appear in the pages of this book. Besides the many illustrations, the book contains original maps by the author and genealogy charts which trace the family down to Robert E. Lee's generation. The Lee coat-of-arms is reproduced, in seven colors, on the front of the case in which the book is contained.

LEVIN, L. M., executive editor. *The Book of Popular Science*. New York 36: Grolier Society, Inc. 1957. 4,294 pp. (ten-volume set). \$71.50. This 1957 edition, just off the press, which undergoes extensive annual revisions, is bound in heavy buckram, with full-color laminated onlays on front covers and three-

color stamping for titles and volume numbers. It, intended for junior high and high-school students, aims to set forth basic facts of science and technology and to explain them simply and interestingly. It takes up astronomy, geology, meteorology, biology, physiology, hygiene, chemistry, physics, and other important fields; it also discusses the applications of science in industry, transportation, communication, archaeology, and the like. The set provides basic information in all these fields. It also discusses such modern developments as the uses of radioactive isotopes in medicine, farming and food sterilization, geriatrics, recent research in the allergies, progress in chemurgy, bioelectricity, radio, astronomy, ultrasonics, radiocarbon dating, and automation.

The history of science is dealt with in a section called "Science Through the Ages," totaling 386 pages. This section presents the development of science from its beginning to the present time. Detailed biographies are given for the more important figures; fact entries in the Alphabetical Index provide succinct biographies of scientists who are not discussed at length in the text.

A recently added feature is the section called "Projects and Experiments," which enables the reader to learn by doing. There are descriptions of simple experiments with water, heat, light, electricity, sound, and chemical substances; the apparatus required can be purchased at low cost. The new section also shows how to carry on a variety of projects, such as collecting shells, minerals, flowers, and insects; making pets of animals caught in field or wood; and setting up weather observation stations.

The Book of Popular Science has fifteen groups, or sections, as follows: The Universe; The Earth; Life; Plant Life; Animal Life; Man; Health; Matter and Energy; Industry; Transportation; Communication; Science through the Ages; Society; Household Science; and Projects and Experiments.

Chapters from different groups appear in each of the ten volumes of the set. This arrangement emphasizes the fact that the different sciences are interrelated and not mutually exclusive. Cross references within articles also serve to stress this point. For readers who wish to concentrate on one particular field at a time, Volume 10 contains a General Outline, in which all the Chapters are listed by groups.

In Volume 10 there is a bibliography, called "Selected Readings in Science," prepared by Mr. Jack E. Brown of the Science and Technology Department, New York Public Library. This bibliography is for readers who wish to investigate more fully any of the topics discussed in *The Book of Popular Science*. A brief annotation is provided for each item, setting forth the range of topics discussed therein or other pertinent information. The titles in the bibliography are divided into fifteen broad subject groups, corresponding to the fifteen main divisions of the set. Within each group, there is a further breakdown of titles into an alphabetical listing of more specific topics. For instance, books on the planets are listed under "Planets," in Group I, The Universe.

There is a useful compendium of scientific facts and figures in Volume 10. This includes a complete list of the chemical elements, the periodic table, physical and astronomical constants and tables, weights and measures (including those of the metric system), conversion tables and a complete list of Nobel Prize winners in physics, chemistry, medicine, and physiology.

The Alphabetical Index is accurate and full and has ample cross references. Illustrated articles, indicated by an asterisk, are given first under each entry; shorter references, arranged alphabetically, follow. The Index contains a num-

ber of fact entries. There are brief biographies of men of science. There is also a separate fact entry for every one of the 101 chemical elements. The entry for a given element provides essential data, such as symbol atomic number, atomic weight, melting point, and so on. It also tells about the date of discovery (when known) of the element, its source, the methods of preparing it, and its uses.

The Book of Popular Science is profusely illustrated. The 4,300-odd illustrations include halftones, line drawings, maps, charts, and diagrams, a number of them in two-color and full color.

The Lincoln Library of Essential Information, revised. Buffalo 3, New York: The Frontier Press Company, Lafayette Building. 1957. 2176 pp. *The Lincoln Library of Essential Information* has been prepared with two controlling ideas constantly in view. One has been to embody in a single volume the largest amount of helpful information for the average reader that has ever been placed between two covers. The other aim has been to select, condense, arrange, and verify this material with a degree of thoroughness and accuracy much greater than has ever been attained in any work of similar scope.

Scope. This work is far more than a mere source book of information and presents a range of knowledge much greater than even experienced users of books would at first imagine possible. It offers first a vast array of practical information on subjects which are fundamental. These embrace English, History, Geography, and Mathematics. In the extensive sections devoted to their treatment, the essentials of each are set forth with unusual completeness. Science is introduced, and a separate treatment is accorded to each of its chief divisions—physiography, geology, mineralogy, astronomy, physics, chemistry, physiology, psychology, psychiatry, zoology, and botany. Following Science is an extensive Department of Economics and Useful Arts, after which will be found a remarkably complete exposition of the subject of Government and Politics.

The cultural divisions of the work embrace large departments on Literature and on the Fine Arts, including an especially full exposition of Music, and a valuable Department of Education. The interesting field of human achievement is covered in Biography, the largest separate division of the work, which contains sketches of over 3600 of the world's most noted men and women. A large amount of valuable information not directly referable to the foregoing divisions has been grouped under Miscellany. The whole body of information is made available by the comprehensive Index.

Method and Plan. The plan of presenting the subject matter of *The Lincoln Library* is unique. It is in no sense an experiment, however, but is a development based on more than 30 years' experience. During this period, the needs and desires of many million purchasers and users of books containing helpful information have been carefully and systematically studied. This study has settled beyond question many significant points, one of the most important of which is that, for practically all readers, the most satisfactory source of general information is a comprehensive single volume.

The services of many eminent scholars and specialists have been enlisted in preparing the different sections, and all material has been subjected to an intensive system of verification. As a result, the work will be found generally free from error.

Perhaps in no age have the rapid advances in knowledge and in mechanical inventions so quickly rendered obsolete much information that was accurate

at the time it was published. Whole new fields have been added to human knowledge within the very recent past. In this work, it has been made a matter of especial care that such subjects should be adequately treated and that the most recent positive contributions to human knowledge should be duly recorded.

In spite of the great amount of material that has been presented in this one volume, the utmost care has been exercised that the text should be legible and attractive. Apart from certain sections intended to be used as dictionaries, the type is of the same size as that employed in practically all newspapers. Nevertheless, by reason of its superior face, or design, and because of the quality of paper on which it is printed, the type is actually much more readable than that in the average newspaper. Moreover, frequent and careful paragraphing, combined with the division of the page into two columns, insures an openness of appearance that makes each page a delight to the eye.

Preceding the treatment of each major subject, such as the English Language, History, Science, or Government, there is a valuable explanatory section setting forth the scope of the subject, its importance, and its usefulness. In addition, many subdivisions, as, for example, Synonyms and Antonyms, have instructive introductory sections. These introductions give the user a clear idea of the value of the subject itself and they lead to accurate knowledge of branches with which he has not previously been acquainted.

This work has utilized carefully planned tables to an extent never before carried out in a single volume and has thus, to a quite exceptional degree, been able to display condensed information in an attractive and readily accessible form. There are in all some hundreds of these helpful tables.

Each department is introduced by an appropriate full page illustration in color. The larger departments contain numerous color pages and halftones illustrating in all nearly 800 subjects. Many of these are exceedingly beautiful, and all are interesting and instructive.

Recently prepared maps of the world, of the different continents, and particularly of the United States and Canada complete the extensive descriptive material in the highly useful Department of Geography.

At the end of each department will be found carefully selected questions covering essentials of the subjects treated. In all, there are approximately 10,000 questions, the answers to which, in themselves, constitute the foundations of a liberal education. Yet this great number forms only a small fraction of the questions which the volume will answer. This special feature will be found a stimulating means of self-improvement for students, teachers, parents, club women, debaters, and all others who desire to be widely informed.

The comprehensive Index enables the reader to obtain information with great speed and precision. While necessarily of generous size because of the extensive contents of the volume, this index is so simple and compact that the utmost ease will be experienced in the use of it. The Index and the twelve departments of The Lincoln Library may be quickly located by means of convenient thumb notches.

LUETGEN, KURT. *Two Against the Arctic*. New York 14: Pantheon Books, Inc. 1956. 249 pp. \$3.50. This book has received the award as the best book for young people published in 1956. Eight foreign editions are in preparation. It is a story of adventure, based on actual happenings in Alaska, in the year 1893. Two hundred and seventy-five men of a whaling fleet were trapped at Point Barrow, a barren arctic outpost, by the ice of a winter that came too soon. Fifteen hundred miles of icy tundra and mountain ranges lay

between them and the two men who decided to bring them help. The initiator of this desperate enterprise, Jarvis, had wasted his life on meaningless adventures, and carries a heavy guilt. Here, at last, he sees a chance to redeem himself. He plans to round up some of the reindeer herds recently imported for the Eskimos, to drive them to Point Barrow. A young doctor is fired by this plan, and decides to accompany him. Together they live through a nightmare of difficulties, raised against them by men and nature. But they also find help and understanding. In the end, they succeed in getting the herds to the men on the edge of starvation.

Not only is this a gripping story of adventure; it is also a study of character and motivation. Jarvis, the mate, a lone wolf and a failure in his own eyes and in those of his fellow men, is the only one with the vision and courage to rescue the men given up by all others as hopelessly lost. In his story, the author shows the difference between true and spurious adventure and between risk for excitement's sake and risk in the service of a good cause.

MADSEN, CHARLES, and J. S. DOUGLAS. *Arctic Trader*. New York 16: Dodd, Mead and Company. 1957. 283 pp. \$4. In the early days of Alaska, when a man could make a fortune—or lose one—in a few furious months, Charlie Madsen sailed from the old world, jumped ship and tried his hand in this turbulent, strenuous arctic land. He married a pretty Eskimo girl who taught him the language of the North and showed him its primitive, kindly, and naturewise ways. He acquired a small schooner and sailed it daringly through the perilous, shifting ice, to trade in Eskimo settlements along the coast of Siberia.

He fought walrus and polar bear, blinding storms and grinding ice packs, sometimes the cupidity and unscrupulousness of other traders; but his main enemies were the Russian gunboats which jealously patrolled the coast.

MASON, M. E. *Three Ships Came Sailing In*. Indianapolis 7: The Bobbs-Merrill Company, Inc. 1957. 246 pp. \$2.75. Three ships came sailing in from the stormy Atlantic, into a bay and up a wide river. The Susan Constant, the Godspeed and the Discovery were bringing a plantation party of Englishmen to start a settlement in the Virginia land.

Among the colonists gazing eagerly at the wild New World was the Susan Constant's youngest passenger: twelve-year-old Martin Wynne. He was the doctor's apprentice. And he was full of great expectations that May day in 1607 when the three ships were moored.

Would his master let him explore the forests and rivers? Would he find the riches he hoped for? Pearls lay on the ground as thick as cobblestones, men said, and the Indian houses were roofed with gold. Would there be exciting adventures with the natives? Would he have to help Captain John Smith fight these savages? Or would worse danger come from the discontented gentlemen of the party who hated the swashbuckling captain?

Martin had thought Virginia would be a true earthly paradise for an apprentice boy. But soon he knew more than London doctors about the ailments men had to suffer in the New World. And if not riches, he had found Indians and adventures aplenty.

This is the story of Martin's part in the changing fortunes of the colony—of building a village, of exploring and planting, of Indian ambushes and feasts, of hardships and dangers, of good times and of the grim starving time before Lord de la Warr's supply ships came sailing in—to make Martin's village the first enduring English settlement in America.

MAUZEY, MERRITT. *Oilfield Boy*. New York 16: Abelard-Schuman. 1957. 80 pp. (7" x 10"). \$2.75. Albert Clay and his friend Tom are the main characters and the entire story of the development of the oil industry is seen through their eyes. All the essential facts about oil are here, including the part geology plays in the locating of oil, but there is much more. These boys love nature and have learned to be observant, so there is a great deal about animals and other nature lore. Also readers will find the oil-field characters fascinating to read about and cannot help but be moved by the author's simple faith in people and the glories of nature.

MAYNE, WILLIAM. *A Swarm in May*. Indianapolis 7: Bobbs-Merrill Company, Inc. 1955. 207 pp. \$3. When ten-year-old John Owen becomes the Beekeeper of his choir school, few people remember why the youngest Singing Boy in this English Cathedral is always the Beekeeper. Part of an old tradition lives on: the Beekeeper must still come before the Bishop one Sunday in May, to sing a short solo and recite the ritual assuring the Bishop that the organist will supply good beeswax candles for the Cathedral throughout the coming year. Yet everyone knows very well that all the candles now come from a warehouse, and are no longer made of beeswax.

John Owen says the odd, quick little tune of the "Beekeeper's Introit" is beastly. He tries to wriggle out of being Beekeeper, because he dreads singing a solo. He can surrender his title to Iddingley, who is smaller though a bit older. Iddingley has a loud voice and will enjoy earning the special fee paid for singing a solo. But Owen soon finds that all the other choristers, and the masters too, think he is a shirker. Trevithic, the head boy everyone admires, lets Owen know that he considers Owen "simply wet."

MAYOR, WILCOX. *Algebra, Second Course*. New York 11: Prentice-Hall, Inc. 1957. 464 pp. \$3.92. This second course in algebra is composed of 13 chapters as follows: coordinates of points on a line; coordinates of points on a plane; quadratic equations; factoring and theory of equations; fractions and fractional equations; exponents and radicals; logarithms; systems of equations, variation; mathematical sequences; statistics and probability; nature of proof in algebra; and curve sketching. Also included are the answers to problems and tables of squares and square roots, of logarithms, of trigonometric functions, of compound interest, and of mortality. Indexed.

MEREDITH, F. L.; L. W. IRWIN; and W. M. STATON. *Health and Fitness*, 3rd edition. Englewood, New Jersey: D. C. Heath and Company. 1957. 464 pp. \$4.20. This edition has retained essentially the same organization as the two preceding editions—an organization that has been tested and proved in hundreds of classrooms since the first edition in 1946. There are nine units divided into forty-seven chapters, subdivided with many brief, teachable sections.

Recent developments in medicine and the latest practices in health and safety are stressed. New sections on Salk vaccine, rheumatic fever, multiple sclerosis, television and eyesight, new drugs, etc. have been added. The basic information, originally prepared by Dr. Meredith, has been constantly revised to keep pace with medical advances. All material has been thoroughly checked for accuracy by experts from the principal health and medical associations of the country.

Study guides at the end of each chapter are designed to help the student link the text with his personal experiences. These varied end-of-chapter materials provide topics for discussion, review questions, and challenging activities for

students of different abilities. At the back of the book is a helpful glossary giving definitions and difficult pronunciations.

Type, illustrations, and color have been combined to produce a text in which both teachers and students will take delight. The text is in two columns. Section headings are in boldface type. Color is used throughout the book—in drawings, graphs, photographs, and to emphasize certain headings. Full color plates illustrate five body systems—digestive, respiratory, circulatory, muscular, and skeletal.

The *Teacher's Manual* contains answers to end-of-chapter questions in the text, suggestions for health teaching, references to books and articles, a film list, and material on sex education to be used if desired.

MCDOWELL, C. H. *A Short Dictionary of Mathematics*. New York 16: Philosophical Library. 1957. 77 pp. \$2.75. This highly practical dictionary will be of use, not merely to students of mathematics, but to everyone who handles figures in his daily life.

It will be particularly welcomed by those who have always felt handicapped because they were "no good at math" in school. For here at last, all mathematical terms in common use—in arithmetic, algebra, geometry and trigonometry—are explained in language that makes them intelligible to everyone.

This dictionary will also be helpful to those wishing to brush up on professional skills—in accounting, engineering or one of the sciences. And it will prove especially attractive to readers curious to discover for themselves, without academic prejudice, how clear, logical and fascinating the science of mathematics really is!

MIERS, E. S. *Rebel's Roost*. Williamsburg, Va.: Colonial Williamsburg. 1957. 138 pp. \$2.75. In this book the reader goes with young Washington into the wild Ohio country and sees the future statesman emerge during this trial by wilderness. The reader meets Tom Jefferson as a student at William and Mary, and understands how, under the influence of such patriots as George Wythe, this lanky-red-headed youth grew in mind and heart and vision. Along Duke of Gloucester Street on a drowsy May morning the reader watches Patrick Henry ride a lean sorrell horse, and senses that a new kind of American leader has come from the hills of upcountry Virginia.

MITCHELL, E. G. *Beginning American English*. New York 11: Prentice-Hall, Inc. 1957. 271 pp. \$2.64. This book is for use in a class under a trained teacher or for use by one or two individuals to whom language classes are not available. It was written in the realization that many newcomers to the United States, if they receive English instruction at all, must get it from English-speaking friends or neighbors who are not trained teachers. The introduction provides the necessary guidance for using the book to teach one or two students.

The lessons are to be taught without translation into the student's native language. By using objects, pictures, and demonstrations of various kinds, the teacher can help the student build a knowledge of English in a process similar to that by which a child learns his mother tongue. The teacher need not know his student's language to use the book effectively. In fact translation would only slow up the learning process.

This book supplies the material for learning fundamental vocabulary and grammar, but it cannot teach the sound of the human voice. For this reason, great stress is laid on the student's listening to the teacher and repeating words and sentences after him.

MONTGOMERY, R. G. *Jets Away!* New York 16: Dodd, Mead and Company. 1957. 190 pp. \$3. Brick Miller had it figured. Volunteering for the Air Corps and spending months at the Tech School at Amarillo Air Force Base was just a way to get his Army service over with. Only a fool, he felt, would stay in as a regular when there was real dough in civilian life, after the Government had taught you about turbo jet engines, oxygen systems, ejection seats and much about B-47's and B-52's.

But somewhere along the line Brick's thinking began to change. After completing his air basic training, he and his buddy Henry Doby were assigned to the Strategic Air Command at Marsh Field, California. While Henry became a boom man on the giant KC-97 tanker refueling planes, Brick found himself a mechanic crewman on a B-47, the SAC's powerful jet bomber. He became sergeant crew chief, and his respect for his superior officers, as well as his devotion to his vital work, was greatly enhanced with a crucial assignment of "Droopy," his particular B-47, over the Pacific.

MONTGOMERY, R. G. *Mister Jim*. Cleveland 2: World Publishing Company. 1957. 221 pp. \$2.75. Ranging the wilderness, reveling the golden summer of the Rockies, the big grizzly was lonely still for the Indian family who called him Mister Jim and had raised him from a cub. Wily Silvertip, his mate, found it slow work teaching this huge clown the wariness and ferocity without which no wild creature can long survive. Together they hunted, wrestled, splashed in the streams, Silvertip chastizing her giant companion as if he were a cub.

But sheepherders soon moved north into the virgin valley, and for the first time in his life Mister Jim encountered men with guns who feared and hated a bear. When he discovered that even the loved and familiar scent of his Indian master, Two Gray Hills, was not to be trusted, Mister Jim, wounded and bewildered, sought refuge in the mountains. How the Indian risked his life and his reputation to save the animal he loved as a friend is a story told without sentimentality, with rich humor, and out of a thorough knowledge of wild animals.

MOORE, PATRICK. *The Earth, Our Home*. New York 16: Abelard-Schuman, Limited. 1957. 143 pp. \$2.50. In this book, the author traces the story of the earth from the time of its birth down to the modern period. The warm, teeming seas of the ancient world are described; next, the strange "armorplated" fishes which turned first into amphibians, crawling apprehensively out of the waters, and then into the fearsome dinosaurs of the Age of Monsters. Then the reptiles die, and mammals take their place, developing at last into true men. We learn too about the Ice Ages, about earthquakes and volcanoes, about the atmosphere, and about conditions deep down below the earth's crust, until we have before us a complete and accurate picture of the world upon which we live.

MOSER, C. G. *Understanding Girls*. New York 7: Association Press. 1957. 252 pp. \$3.50. Here is truly the best we know today about what our little girls and our teen daughters are made of—physically, emotionally, intellectually, socially. Here is how they grow; what they need from us; how we can help them mature happily and wisely from childhood through their teens. It is a warmly sympathetic and scientifically sound guidebook for the parents, teachers and group leaders of some 20,000,000 girls from 6 through 17 in our land.

This is the record of the stage-by-stage development of all the girls you know . . . told by a father of a daughter and a youth leader whose earlier sibling book,

Understanding Boys, won plaudits from child specialists and general critics alike. For easy reference, the physical, emotional, intellectual and social growth patterns are explained in separate sections for each of these age brackets: 6 to 8, 9 to 11, 12 to 14, and 15 to 17.

Motion Pictures, Slides, Filmstrips. University Park: The Pennsylvania State University, Audio Visual Aids History. 1957. 320 pp. This is an annotated, classified, bibliography of all 16 mm, sound and silent, 2 x 2 slides, and filmstrips, and recordings that are available for school use on a rental basis from the audio visual library. Included with the information is time for showing, level of instruction, service charge, and such other data as to assist the person in determining usefulness of the aid. Included also is a subject index and a title index.

MUSGRAVE, FLORENCE. *Robert E.* New York 22: Hastings House. 1957. 192 pp. \$2.75. Robert E, of course, was named after the great general, Robert E. Lee. Whether living up to the name made him such a scrapper, nobody knew. But his grandfather had taught him to use his fists and use them he did. This was all right in the mountains where, for the most part he lived a simple, easy-going life with Gramp. But when his mother appeared and moved them both to the city, things began to happen!

National Manpower Council. *Womanpower*. New York 27: Columbia University Press. 1957. 395 pp. \$5. This country's working population has been undergoing vast and continuing changes. Since 1890, the number of working women has increased from 4 million to 22 million—from one sixth to more than one third of all women and from one sixth to nearly one third of the labor force. Two fifths of the increase in the number of working women has occurred in the last twenty-five years. Since 1940, the growth of the female labor force has been especially rapid.

In depicting the changing role of paid employment in the lives of American women, the National Manpower Council points out that 70 per cent of all women workers were single in 1890 and the majority of them were under twenty-five years of age. In 1890, moreover, probably half of the women in the country never entered paid employment. Those who did work when they were young left paid employment as soon as they were married, and were not likely to return to work unless they were widowed.

Major changes have occurred since that time. For example, today nearly 30 per cent of all the married women in this country hold jobs. More than half of the employed women are married, and almost half of them are more than forty years old. This book, the latest of the National Manpower Council's continuing studies of the nation's manpower resources, focuses on the role of women in paid employment in the United States. The Council deals with the significance of women's participation in the labor force from the viewpoint of the country's total manpower resources. In its Statement the Council recommends ways of insuring the more effective development and utilization of the nation's womanpower resources.

Chapters by the Council staff consider the composition of the female labor force, the history of women in paid employment, the distinguishing characteristics of women's behavior in the labor market, the education and training of girls and women, the impact of World War II on women's employment, the women's services in the military establishment, the legislation affecting women workers, the employer policies and practices involving women in business and

industry, the problem of shortages of highly trained personnel, and the forces which impel so many mature married women to return to work.

The National Manpower Council's study illuminates the extent to which women are indispensable to the national economy and their unique role in the provision of health, educational, and other essential services. This study makes a contribution to a comprehensive understanding of the major factors which influence the participation of women in paid employment and of the new place which work occupies in the lives of American women.

NEWMAN, T. K. *The Black Dog Trail*. Boston 20: Christopher Publishing House, 1140 Columbus Avenue. 1957. 221 pp. \$3. Warriors become civilized Americans! Poor, illiterate Indians become a wealthy tribe! Natives turn tepees and wasteland into large farms and modern homes! This is the story of the Osage Indian as told in this book. It is the story of two great chiefs and their efforts in behalf of their people. Chief Black Dog, the first, labored long and hard for the benefit of his tribe, and this work was carried on to an even greater extent by his son, Chief Black Dog, the second. These two chiefs have made the Osage Indian the wealthiest Indian tribe in the country. Piece by piece, through histories, libraries, and living people, the life of Black Dog has been traced. Until now no biographer has undertaken the assembling and reconciling of dates and material into a narrative long enough to do justice to Chief Black Dog, and his son, Black Dog, the second.

New World Writing No. 11. New York 22: New American Library of World Literature, Inc. 1957. 288 pp. 50¢. Selections of fiction, criticism, drama, and poetry from the works of writers throughout the world.

New York City Guide and Almanac, 1957-1958. New York: New York University Press. 1957. 528 pp. \$2.75. A hand record of what New York is and what it does. Contains information on government; taxes; schools; colleges; statistical data; well-known stores; its port; chronology of the New York press; and lists of and comments about newspapers, magazines, books, libraries; exhibits, museums, historic houses, churches, parks, sports, plays, film production, hotel, eating places, maps, etc. A complete book of information.

OBERMEYER, M. B. *The Listening Post*. New York 3: Longmans, Green and Company, Inc. 1957. 208 pp. \$3. Christmas Eve 1906 and over the air from Brant Rock came the first radio broadcast—the miracle of Christmas music over the air. This was the beginning of radio history as far as the public was concerned. The early 1900's were years of great change and inventions—wireless, airplanes, automobiles, the first world war and American involvement.

All these impinge on the Burnett family whose fortunes we follow in *The Listening Post*. Father is a telegrapher and charts the great events. He tinkers with his homemade radio. He hopes his son will be an electrical engineer, and many sacrifices, little and big, help to fill Dan's bank for his college expenses. But there are compensations, such as buying an automobile. What excitement that was! Dan and his friend Alex have the almost unbearable happiness of rescuing a pilot and pulling his airplane to safety. The Boy Scouts, Dan guiding them, make crystal sets, and when they receive a message about animals escaped from a small show help round them up.

When the grandparents need help following a great flood in the Ohio Valley, Dan voluntarily gives up his college fund and sets off for Madison to earn his way. The University of Wisconsin was chosen, instead of Pennsylvania, for its pioneering in wireless. But the war interrupts and takes Dan to France,

where sister Peggy also serves as a telephone operator. Later, when his college work has been completed, with Peggy singing, Dan repeats on his own small-town radio station that Christmas program heard so long before. In this book the author has been successful in giving her readers a feeling of the wonder of those early days of the Twentieth Century, the sensation of taking part in great events.

O'CONNOR, PATRICK. *Mexican Road Race*. New York 3: Ives Washburn, Inc. 1957. 190 pp. \$2.75. In this sequel to *The Black Tiger*, Woody Hartford and his expert mechanic, Worm, enter the Mexican Road Race with a brand-new model, the Mark II Black Tiger. The original Black Tiger had cracked up, but Woody, Worm, and the owner think the new model is a much better car in every way. The problem was to convince the fans and the experts of this. What better way than by driving, and perhaps winning, the grueling two-thousand-mile Mexican race? The prize to the winner was not only much-needed publicity for the car but the highest honor as a driver, and a large sum of money.

Every bit of skill and stamina that Woody possesses and all of Worm's mechanical knowledge are needed in the driving of this race. Expert help also comes from an enthusiastic Mexican mechanic who throws in his lot with the Mark II.

This exciting story of one of the most famous sports-car races is based on the author's firsthand experience of sports-car racing and his understanding of the qualities required of the successful driver: courage, caution, sportsmanship, and intimate knowledge of his machine.

OLDENBOURG, ZOE. *The Awakened*. New York 14: Pantheon Books, Inc. 1957. 493 pp. \$4.95. The author, here writes, for the first time, a novel with a contemporary setting. The place is France, the time the period leading into World War II. The theme is a woman's struggle between two loyalties. Stephanie's father Leopold Lindberg, a refugee from Hitler Germany, is a highly cultured Jew who has been converted to Catholicism and has developed an exalted notion of the synthesis of Judaism and Christianity. He is brilliant, handsome, rather arrogant, and a demanding and tyrannical father. The young man Stephanie falls in love with, Ilya, is the son of a White Russian officer who now works as a laborer, lives squalidly with an Armenian mistress, and has taken to drink. Ilya himself, in order to help support his family, has left high school and works in a radio factory. Slowly and subtly the two young people become enmeshed in a passion that is ruthlessly opposed by Stephanie's father. Devoted to her father, committed to his exacting demands, but irresistibly drawn to Ilya, Stephanie betrays all she has been brought up to respect.

The story of this intense, tormented love is woven into a rich fabric of characters and incidents. There is Stephanie's circle of young students; her father's intellectual milieu; and, magnificently vivid, the colorful Russian colony, reckless, exuberant, alternately melancholy and high-spirited. And all the time the sky is lit by the lurid signs of things to come.

OLSEN, R. I., and DAVID PORTER. *Torpedoes Away!* New York 16: Dodd, Mead and Company. 1957. 256 pp. \$3. Come aboard the U. S. S. Plankton and meet the sub's hard-hitting but genial commander, Captain Nichols, who will settle for nothing less than perfection from his crew. Meet Whale Tail, chief torpedoman; Sweeny, the freckle-faced gun captain; and Ensign Winslow, at first a round peg in a square hole who is just beginning his

exciting career as a submarine officer. Sail with the officers and crew of the Plankton on her trial runs, share their dramatic World War II patrols that carry them from Panama to Pearl Harbor and through the enemy infested waters of the Philippines and Australia. Take part in their thrilling adventure when they bag a fat oil tanker, huddle with them in the cold and dark at the bottom of the Pacific as they survive savage depth charge attacks. And most of all, join in the fun-loving crew's humorous diversions which add a lighter interlude between the many action-packed episodes.

PARSONS, G. A. *Put Her to Port Johnny*. New York 17: Henry Holt and Company, Inc. 1957. 223 pp. Float down the Ohio River on a houseboat with eleven-year-old Johnny Honeycutt and his family. The river people—the shanty-boaters, the “river rats”—you’ll meet are courageous, with hearts stout enough to meet the floods, fight the ice, and weather the storms that the river subjects them to; hearts big enough to withstand the contempt of the folk who live on the banks.

Johnny’s father wasn’t cut out to be a farmer, but he hopes he can make a good and decent living on the river. One-armed Fisherman Jim befriends the Honeycutts and teaches them all he knows about the river and her moods—and what Jimbo doesn’t know isn’t worth passing on. His nephew Frank even manages to persuade the disapproving Susie, Johnny’s sister, that drifting down river, trading cargoes of queen’s ware dishes for junk, is a fine way to live.

PEATIE, D. C. *The Rainbow Book of Nature*. Cleveland 2: The World Publishing Company, 2231 West 110th Street. 1957. 320 pp. (8" x 11"). \$4.95. This nature book has been written for youth of ages ten and up. The author has written it not only for children already interested in the out-of-doors, but also for those in the city. Here are pages discussing the antiquity of pigeons domesticated in Babylon, and explaining how peregrine falcons come to nest on the crags of skyscrapers. Here too are desert and seashore, the farm pond in spring and the meadow in summer, and even the old barn with its swallows and owls and its cattle bred by man from strains lost to history. Here also is talk of the color of life and the shape of it, and the deep-lying patterns of its organization. The authors answer such questions as: What animals have the longest span of life? Why do birds sing? Why do the woods turn color in autumn? What animal can go its whole life without a drink of water? Curiosity is not only aroused, but it is also satisfied by the answers to a multitude of questions about nature. It is beautifully illustrated (more than 250 illustrations) in vivid colors and brilliant black-and-white by Rudolf Freund. In addition to the text and pictures, it is concluded with a list of books suggested for further reading, as well as a list of films and recordings.

PETERS, WILLIAM. *Passport to Friendship*. Philadelphia 5: J. B. Lippincott Company. 1957. 286 pp. \$3.75. Here are the true adventures of young people trying to span the gulfs of culture, custom, language and tradition which separate the nations of the world. In Europe, Asia, North and South America, their experiences are as different as the countries they visit, to live, for a time, as members of foreign families. Their goals are those of The Experiment in International Living, the organization which made their adventures possible: to learn to live as other people do, to adapt to their ways, to become members of their families and, in the end, to understand and respect them as only a real friend could.

This book is also an informal history of the Experiment, now celebrating its twenty-fifth anniversary, and a partial biography of its founder, Donald B. Watt, who has successfully navigated most of the gulfs, actual and figurative, in the world.

This is the story of young people who have proved their ability to be "at home" abroad and of what the experience has done for them.

PHILLIPS, E. A., and J. F. GIBSON. *Psychology and Personality*. New York 11: Prentice-Hall, Inc. 1957. 352 pp. \$3.96. The authors state that they have written this book for three reasons: "We observed that more information on broad mental hygiene topics needed to be disseminated at the high-school level; we observed that high-school students had a lively natural interest in human behavior of all types; and we felt that the field lacked a book that could stand on its own merits and was not just a predecessor to introductory psychology or mental hygiene at the college freshman level."

The material included is highly flexible—that is, useful in a variety of curricular offerings and with a variety of emphases. The three main sections—The Child's Development; Psychology, Mental Hygiene, and the Individual; and Contemporary Problems in Individual, Family and Social Life—and the chapters included in them, allow for almost any arrangement of topics that seems desirable. Any section can be telescoped or expanded, and the order of sections can be altered without damaging the content or value of the materials studied.

Photo Dictionary and Quick Reference Guide. New York 17: Morgan and Morgan, Inc., 101 Park Avenue. 1957. 128 pp. Hard cover, \$3.50; paper cover, \$2.50. This book supplies all the terms photographers need most. It is full of useful information conveniently arranged for amateur and professional alike, and is also helpful for schools, libraries, camera clubs, darkroom reference, general browsing by the occasional or full-time photographer. Thousands of concise, authentic, reliable definitions are arranged in four easy-to-use sections to save time when time counts—photographic terminology, illumination definitions, motion picture nomenclature, and chemical glossary.

All the definitions in the photographic terminology section were especially written and verified for the large, famous *Photo-Lab-Index* reference encyclopedia, and are reproduced here in their entirety. The motion picture nomenclature and the illumination definitions are all drawn from the American Standards Association official definitions. They provide standard usage throughout the photographic profession and industry, and the illumination field. The chemical glossary includes all the information necessary to the photographer—formulas, characteristics, synonyms, trade names, common grades, uses, and, in many cases, antidotes. This section of the photo dictionary can be used as a complete study course in itself.

POHL, FREDERIK. *The Case Against Tomorrow*. New York 3: Ballantine Books. 1957. 153 pp. 35¢. Short, science-fiction stories.

POND, S. G. *African Explorer*. New York 16: Dodd, Mead and Company. 1957. 192 pp. \$3. For Carl Akeley, life was a great adventure that took him from a farm in upper New York State to the farthest reaches of wildest Africa. From boyhood, he was intrigued by the wonders of nature and he dedicated himself to educating others in some of the most inaccessible secrets of the great outdoors, with Africa as his particular province. His earliest efforts in taxidermy revealed a flair for giving animals and birds an appearance of life after death, and his artistic sense and inventiveness during his appren-

ticeship at the Ward Scientific Establishment soon won him acclaim as an expert from members of his profession.

POWER-WATERS, ALMA. *Virginia Giant*. New York 10: E. P. Dutton and Company, Inc. 1957. 224 pp. \$3. The mystery of the true identity of that fabulous Virginian of Revolutionary times, Peter Francisco, has never to this day been completely solved. Abandoned on a Richmond dock by the crew of a Spanish ship, the terrified six-year-old boy, understanding and speaking no English, could tell nothing about himself but his name. When it became apparent that no one would claim him, not even as a bound-boy, he was given refuge in the home of Patrick Henry's uncle, Judge Anthony Winston, who, in spite of his wife's protests, eventually adopted the boy.

In 1775, when Peter is sixteen and has already been made the manager of the Winston plantation, he gains Judge Winston's reluctant permission to enlist in the Continental Army. The bitter and frustrating engagements of the following months are at first seen through the eyes of this sensitive and untried boy, who meets death and destruction for the first time. But Patrick Henry's influence has been intimate and personal, and the flame of patriotism is still bright for Peter when he meets the young hero Lafayette, while they are both recuperating from wounds received at Brandywine. It is Lafayette who gives Peter a broad perspective on the integrated military actions of the Revolution, and who responds eagerly to Peter's devoted loyalty.

PRABHAVANANDA and MANCHESTER, translators. *The Upanishads: Breath of the Eternal*. New York 22: New American Library of World Literature, Inc. 1957. 128 pp. 50¢. The wisdom of Hindu Mystics, selected and translated from the original Sanskrit.

PROTHEROE, R. H. *Beyond the Mountains*. New York 16: Abelard-Schuman, Limited. 1957. 240 pp. \$3.50. Louis Dumas decides to move his family from their small fishing village to another town on the Gaspé Peninsula where his friend Pierre has some tourist cabins, because Pierre has assured him that more money is to be made there. Though no one else in the family is eager to go, Marguerite is the most rebellious, because she is going to have to be waitress in the dining room for the tourists she dislikes, without even knowing them. The book centers around Marguerite and her problems.

RAWNSLEY, C. F., and ROBERT WRIGHT. *Night Fighter*. New York 17: Henry Holt and Company. 1957. 383 pp. \$4.50. This book tells, from the "back-seat point of view," the exciting story of the radar-equipped night fighter—the men who developed and flew it, and the vital role it played in the war in the air.

The back-seat narrator is C. F. "Jimmy" Rawnsley, who was an aerial gunner in the early days of World War II, when those first disconsolate crewmen known as "The Weavers" or "The Magicians" boarded the stripped-down old Blenheims, knelt on "the prayer rug," peered into the mysterious "black box," and muttered target instructions that had the pilots weaving all over the sky. Rawnsley foresaw the future of radar and became an operator. His pilot was Group Captain John Cunningham, one of the war's greatest aces, recent recipient of the Harmon Trophy from President Eisenhower, and now chief experimental test pilot for de Havilland.

Cunningham and Rawnsley were not only the first to find the way in this new form of air combat, but they also emerged "the outstanding night-fighter crew of the war."

RICHARDSON, F. H. *For Teen-Agers Only*. Atlanta 2, Georgia: Tupper and Love, Inc. 1917. 126 pp. \$2.95. If you are one of the thousands of young people from fourteen to seventeen who are longing to get married now, this book is for you. No matter how deeply in love you are, you realize that marriage is a serious matter and that it calls for serious thought. Maybe you sometimes find yourself wishing you had someone to talk to about it in addition to your parents—some impartial, older person who can see both sides and help you decide what is right.

Reading this book is almost like having a private talk with your own family doctor. As a matter of fact, the author has written his book in the form of a series of talks with young people whose problems are the same as your own. The questions they ask are probably the very questions you have been asking yourself. And the author's answers are frank and direct—just the kind of answers you would hope to get from an experienced doctor and counselor with a wise and sympathetic understanding of young people's emotional needs.

RIESEBERG, H. E. *Treasure!* New York 17: Henry Holt and Company, Inc. 1957. 122 pp. \$2.50. In this fascinating collection of adventure stories, the author tells from first-hand experience of lost treasure hoards still scattered throughout the world, of the few that have been found, and of the untold riches even now awaiting the courageous adventurer.

Here are tales of doubloons and precious stones, and thick bars of gold and silver, that gleam dully in the dark depths of the ocean, in faraway jungles, on uncharted reefs, or lie covered with shifting sands at a harbor mouth. Here are stories of ships that long ago mysteriously disappeared from the seas; of ghostly, unmanned ships that are sighted still, sailing aimlessly with the tide; of ships like the famous *Mary Celeste* that carried to her ocean grave the answer to the mystery of her vanished crew. There's excitement, too, in the telling of an unequal struggle with a giant octopus in the gloom of a sunken wreck and the witnessing of a terrifying fight to the death between an anaconda and a huge alligator.

ROBERTSON, TERENCE. *The Ship with Two Captains*. New York 10: E. P. Dutton and Company, Inc. 1957. 256 pp. \$3.95. The submarine *Seraph's* hush-hush exploits in the Mediterranean during World War II ranged from spiriting Giraud away from France to launching the Man Who Never Was.

Unlike ordinary submarines, H. M. S. *Seraph* has not one captain but two—British and American. She flew the flags of both nations (and on suitable occasions the Jolly Roger as well); and her crew adopted a curious Anglo-American patois all their own.

The *Seraph's* exploit was the secret landing of General Mark Clark in North Africa, prior to the invasion, and it is a tribute to all concerned that General Clark considered the *Seraph's* behaviour exemplary, even if he was forced to leave half his clothes behind on the hurried return to the ship.

ROSEBOOM, E. H. *A History of Presidential Elections*. New York 11: The Macmillan Company. 1957. 576 pp. \$8.50. Looming large in the drama of American politics are the occupants of the White House. They play the leading roles, but, in the supporting cast there are other important figures—the unsuccessful candidates, the vice-presidential nominees, key Congressional figures, state and city bosses, and other powerful politicians. In this book, the author relates in detail the full-scale story of the presidential elections—their issues and problems—from Washington to Eisenhower. The author also stresses the political developments between campaigns, a vital matter in election years.

Elections are skillfully analyzed as well as the caliber of presidential leadership and the rise and decline of parties. Based on thorough research and scholarship, here is popular history. A chapter on the 1956 campaign makes this vastly entertaining and informative record completely up to date.

RUPP, A. F. *Rupp's Championship Basketball*, 2nd edition. New York 11: Prentice-Hall, Inc. 1957. 239 pp. In answer to requests of thousands of coaches, players, and fans from all over the nation, collegiate basketball's most successful coach re-examines his winning system within the new play trends and rule changes from 1948 to now.

Rupp gives special attention to the change in play effected by the widened foul line. Scores of new action photographs and more than 100 redesigned diagrams highlight Rupp's direct, lucid explanation of how he continues to mold the winningest teams in the land.

As its predecessor, this new edition stresses fundamentals. Rupp's detailed analyses of how he teaches and drills every individual reveal the time-tested, practical methods that save him coaching time and trouble, help him spot and fully develop his players' potential.

Rupp devotes a full chapter to offensive and to defensive play. In the first, *The Seven Cardinal Principles of Defensive Play*, he spells out what each player must do to help stop any defense, exactly how to do it and why. In the second, *The Seven Cardinal Principles of Offensive Play*, the author fully explains how he develops the aggressiveness, speed, and coordination that make a smooth, winning team offense. In a special chapter, the author details and diagrams his famed "Kentucky Continuity Offense" and all its variations.

SCHAEFFER, HEINZ. *U-Boat 977*. New York 3: Ballantine Books. 1957. 148 pp. Harbound, \$3.95; paperbound, 35¢. A German U-boat commander's personal account of the Battle of the Atlantic.

SCOTT, J. I. E. *Getting the Most Out of High School*. New York 3: Oceana Publications, 80 Fourth Avenue. 1957. 144 pp. \$2.50. This book is a guide to teenagers, their parents, and their teachers on healthy approaches to secondary-school education. Complete with charts, questionnaires, and illustrations, this book is designed to answer the questions raised by high-school students as to the ways in which a secondary-school education contributes to their personality development, their planning for a job, and their ability to accept the responsibilities of citizenship.

SCHULTZ, J. W. *My Life as an Indian*. New York 16: Duell, Sloan and Pearce. 1957. 159 pp. \$3. This is the true story of the author's life as an Indian in the days when the great buffalo herds still roamed the northern prairies. Lured by tales of adventure, the youth left his New England home and made his way to the last outpost up the wide Missouri.

There he fell completely under the spell of the exciting life of the Plains Indians. As a friend and fellow warrior of the braves, he came to know the Indians as well as any white man who ever lived.

After his family compelled him to return home, he tried to settle down. But it could not be done. He had found for himself the magic and the thrill of living as an Indian.

SCOFIELD, DOROTHY. *The Shining Road*. New York 3: Longmans, Green and Company. 1957. 186 pp. \$2.75. A summer vacation on the Bay of Fundy seemed a poor substitute for travel in Europe. It turns out to be the time and the place, however, for Elinor to figure the answer to her puzzle. What does she want to be? Fun and sightseeing do not satisfy her, even when she

meets the nice boy, Tom, at the bird island. But Martha and the many brothers and sisters she has in charge do not interest her.

In order that Martha may have more time for her, Elinor helps with tidying the guest cottages and serving in the dining room. When an accident incapacitates her friend, Elinor even takes over Martha's job and enjoys the responsibility. But, naturally, this is not what she wants for her life's work. What is? Even Martha, though her accident may postpone the necessary college education still farther, knows what she wants to do. Kathi, the German girl with whom all sympathize so greatly, has her music—when she conquers her fear of playing before people. But Elinor in her love of the younger children, in her delight in storytelling, finds, after all, her answer. Before summer ends she is aware of it, and understanding herself helps her to cope with Tom's moods.

SCOTT, A. F. *The Poet's Craft*. New York 22: Cambridge University Press. 1957. 232 pp. \$3.50. Section I, *The Poet's Manuscript*, has photographs of manuscript poems by twenty-four poets, each faced by a transcription reproducing its deletions, half-starts, amendments and alternatives; without comment, it suggests vividly the continuing process of creation.

Section II, *Printed Revisions*, presents for comparison the first section published later. A brief history of the changes is given, so that the making of some of the poems can be followed over the years.

Section III, *Raw Material*, gives six poems, with the source used by the poet for his poem (e.g. Shakespeare's use of North's *Plutarch*, Keat's of Boccaccio).

Section IV, *The Poet's Translation*, gives 34 poetical versions of twelve originals. Two, three, or four versions are given as examples of the way different poets use the same material. An appendix gives the poem or extract in the original.

Section V, *Poems for Appreciation*, contains 120 poems, paired for contrast and comparison, unsigned, and with a specific critical subject suggested for each pair.

SELBY-LOWNDES, JOAN. *The Circus Train*. New York 16: Abelard-Schuman Limited. 1957. 240 pp. \$3. When the book opens, Kai Yong is a teenager, about to start his career in the circus. We live with him through all his experiences throughout the world until he is in his mid-sixties, retired, and training his teen-age children to succeed him. Young people will be interested to discover that the problems and ambitions of grownups are not so different from their own.

All the thrill and excitement of circus life are in the pages of this book—the one-night stands, the triumphs and disappointments, the journeying from city to city and country, the effect of two wars on the lives of stage people, particularly on the Yong family with its Chinese father and German mother.

SEVERN, BILL. *Magic Wherever You Are*. New York 3: David McKay Company, Inc. 1957. 128 pp. \$2.50. Here is magic with a new twist—not an act in front of a critical audience with lots of queer gadgets and big talk, but magic for fun, anywhere you are. The real secret of magic is surprise: something happening that just "can't happen." With the simple tricks in this book, you can make surprise magic happen anywhere, any time: in the living room, the dining room, the outdoors. You will give the secrets of stage magic a natural, not a theatrical use, by bringing them into home surroundings. What is more, every trick explained in the book is followed by suggestions as

to other ways in which the trick behind it may be used, so that you can develop your own *personal* kind of magic.

SHIPPEN, K. B. *Men of Medicine*. New York 22: The Viking Press. 1957. 220 pp. \$3.50. "More than five thousand years ago in Sumeria," begins the author—and thus the curtain quietly rises on the dramatic story of medicine.

The first lines are spoken by the Sumerian priest-physician, with long fleece petticoat, carefully curled beard, and tall pointed hat, who used spells and incantations to treat his patients.

Next to appear is Sekhetenach, chief physician of the Pharaoh who ruled Egypt in the fifth century, B.C. The Pharaoh raised a small monument to his doctor because he had "healed the king's nostrils."

A drama of large compass, covering several millennia and involving great conflict and a host of contrasting characters, this book reveals the irascible Dr. Harvey ("apt to draw out his dagger upon very slight occasion"), who discovered the circulation of the blood. And it tells of Dr. Ephraim McDowell, a little-known practitioner on the Kentucky frontier, who performed the first abdominal operation, while a crowd, which regarded the doctor as a potential murderer, awaited the outcome with a rope thrown across the limb of a tree.

The last act is as modern as are the "mycins" and the Salk vaccine, and when the curtain finally falls, the reader feels he has actually known the doctors whose portraits have been brilliantly drawn.

SLOANE, ERIC. *American Barns and Covered Bridges*. New York 10: Wilfred Funk, Inc. 1954. 112 pp. \$3.95. Here in text and pictures are the great barns these men, equipped with nothing more than a straight-edge, a compass, a square, and a good sound logic, built in New England, Virginia, Pennsylvania, and the West. They reflected an agrarian era but were new in material and execution—bigger, like the American dream, than any of their predecessors. Many of them stand today, sturdy and weather-cured and in beautiful proportion, for in building for soundness and endurance, for wind and weather, these men built with unsurpassed architectural honesty.

Here too are the covered bridges of the United States, later than the barns, but built on the same principle, sound wood in the right places. Emblazoned with signs, posters, admonitions, these bridges bore a cross-section of American life; for besides the farmer, his family, his stock, and the commercial traffic there was a parade of traveling peddlers, minstrels, circuses, preachers, vagabonds. They were used as drill halls or blockhouses for troops, and on occasion for town gatherings. They acquired picturesque names—Old Maid Parker's Bridge; Old Meany's Bridge, Wizard Oil Bridge, Joy Bridge, Panther Bridge. They stand today in thirty-three states of the Union, and their greatness lies not only in the past they recall so vividly but in the part they played in nineteenth-century public enterprise and their straightforward expression of functional structure.

SLOANE, ERIC. *American Yesterday*. New York 10: Wilfred Funk, Inc. 1956. 123 pp. \$3.95. In the days of our great-grandfathers there were farmers and lawyers, butchers and bakers, of course. But there were also barber-surgeons, tithingmen, sawyers, nailers, charcoal-men, plumbum-men, wheelwrights, drovers, dowers; there were fence-viewers and pump-makers, sell-mongers and dry masons, and artisans in great variety. To us today many of these old-time occupations bring no recognition, and yet they played their important part in times gone by.

Curiously enough, most antiquarians have passed by these occupations in their delving into the religious, social, and economic cultures of earlier generations. The author has here brought together engrossing facts and anecdotes and, with his observant pen, has illustrated the activities, the customs, the things that were created by the people who made their living in what some of us today are prone to call antique ways.

SLOANE, ERIC. *Our Vanishing Landscape*. New York 10: Wilfred Funk, Inc. 1955. 107 pp. \$3.95. Here is the story of the winding, patient roads under great canopies of trees, leading the traveler from farm to farm; then the barns themselves, sturdily built of fieldstone or the hard ageless first-growth timber now virtually unobtainable, their unromantic but beautifully functional architecture mingling with earth and sky in graceful lines. Stretching far and wide in all directions were the fences and walls, built less for privacy and exclusiveness than as protectors of, and from, wandering cattle; the old mills and their variously shaped millstones with fascinating "furrows" cut in their surfaces to ensure the proper grind of the cereals and grains put into their hoppers. Linked in a close economic network of agrarian life were the canals, corduroy roads, and turnpikes; the ingenious and colorful road signs; the great sleds that drew tons of corded wood or broken rock along snow-packed roads in the midst of winter; and, of course, toll-gates, water-wheels, ice-houses, canal boats, snowplows, and that peculiar antique, the cumbersome but efficient snow-roller which packed road snow into a firm, icy surface for the sleds.

The author also tells fascinating stories of the people and the times. For example, there are accounts of the toll-road owners and the millers whose control of essential services gave them so large a part in our early economy. There are anecdotes about the vogue for bicycles later in the nineteenth century, and of their struggle against the oncoming automobile; and a description of the extraordinarily fast racing sleds, some of which made over a hundred miles an hour on smooth ice, thus foreshadowing twentieth-century military experiments. And, of course, Mr. Sloan has included more stories about the covered bridges which he described in *American Barns and Covered Bridges*, together with lore about famous country inns, the picturesque and often dissolute lives of the sign painters (some of whom later became famous artists), the much harassed circus folk, and other entertainers of the time.

SPYKMAN, E. C. *The Wild Angel*. New York 17: Harcourt, Brace and Company. 1957. 221 pp. \$2.75. Edie, Hubert, Theodore, and Jane are four indomitable children who lived at the turn of the century.

True, it was not Madam who set the hilarious incidents in motion. Father did that with his definite and explosive decisions. It was he, for instance, who decided they should have the French governess whose stay ended in such an aromatic fashion. And it was Father who bundled them off to Mr. Carpenter's cabin in "the far North" to rough it for a while. But it was elegant Aunt Charlotte who maneuvered them into dancing school and then herded them to the costume ball with such uproarious results.

STEFANSSON, EVELYN. *Here Is the Far North*. New York 17: Charles Scribner's Sons. 1957. 158 pp. \$3.50. The author shows us the countries of the far North as they are today—and also takes us back into their history. First we go with her on the flight that she recently made from Los Angeles to Copenhagen over the North Polar route. This is the short route across "the top of the world" suggested by her famous husband, Vilhjalmur

Stefansson, many years ago but not considered practical at that time. Below the plane lie the countries that the Stefanssons know so well and have studied extensively.

After the airplane view of the countries we go back to see three of them more closely—Iceland, the world's most literate country; Greenland, Denmark's newest country; and the vast Soviet sector.

Today all of these countries are of growing importance, as is our own portion of the Arctic and that of Canada.

STEFANSSON, EVELYN. *Here Is the Far North*. New York 17: Charles Scribner's Sons. 1957. 160 pp. \$3.50. The author shows us the countries of the far North as they are today—and also takes us back into their history. First we go with her on the flight that she recently made from Los Angeles to Copenhagen over the North Polar route. This is the short route across "the top of the world" suggested by her famous husband, Vilhjalmur Stefansson, many years ago but not considered practical at that time. Below the plane lie the countries that the Stefanssons know so well and have studied extensively.

After the airplane view of the countries we go back to see three of them more closely—Iceland, the world's most literate country; Greenland, Denmark's newest country; and the vast Soviet sector.

Today all these countries are of growing importance, as is our own portion of the Arctic and that of Canada.

STEWART, JANE, (collector). *Mrs. Homemaker's Forum Encyclopedia of Household Hints*. New York 18: Julian Messner, 8 West 40th Street. 1956. 255 pp. Here are suggestions to make housework easier. Some present ideas about how to make the best use of things around the house which often settle in the attic.

STRACHAN, WINONA. *Christopher Jarrett of New Plymouth*. New York 10: E. P. Dutton and Company, Inc. 1957. 192 pp. \$3. Sailing into the harbor aboard the shallop to which he had been transferred in mid-ocean, the settlement of New Plymouth presented a disheartening prospect to twelve-year-old Christopher Jarrett. This was to be his new home, through no choice of his own! Three years after the Mayflower had sailed back to England, leaving its pitifully small but determined group of passengers on the shore of the New World, the settlement they had built in the wilderness appeared to offer little to a child of the London gutters.

As Christopher helps to push back the forest, build cabins and boats, fight marauding wolves, haul herring for fertilizer, plant and harvest the crops, a vivid picture of life in New Plymouth is created for the reader. Great names from America's past emerge as real people . . . Miles Standish, Governor Bradford, John Alden, Elder Brewster . . . all the hopeful men and women . . . the temperamental, the sad, the courageous, the greedy . . . who dared to believe that a dream could become a reality.

Although this is primarily the story of Christopher Jarrett and his search which leads him to find not only his sister but himself as well, it is far more than that. It is the story of the first stumbling steps in the growth of America, recreated in absorbing and authentic detail.

Study Abroad. Paris 16, France: UNESCO. 19 Avenue Kleber. 1956. 719 pp. \$2. (Paper cover.) This eighth edition, covering fellowships and scholarships available, in most cases, during 1957, lists over 74,000 such opportunities, offered by governments, universities, foundations and other types of organiza-

tions in more than one hundred states and territories. The subjects of study cover almost every field of learning; the awards permit travel and study in almost every country of the world. This book includes fellowships offered by eight countries which were not shown as donors in the previous edition: the Republic of China, Czechoslovakia, the German Democratic Republic, the Republic of Korea, Morocco, Panama and Poland; information is also given on fellowship programmes of the Union of Soviet Socialist Republics in so far as they relate to non-self-governing and trust territories.

Attention is drawn to two new features which add to the usefulness of the publication. One of these is a chapter entitled 'Facilities for Study Abroad: Organizations Offering Advisory Services and Practical Help' which gives information on the services, other than direct financial aid, offered by 140 organizations in 45 countries. The other is a chapter on 'Teaching Appointments Abroad'. This is based on work originally begun at UNESCO in 1949, and should be of special interest to members of the teaching profession who wish to improve their knowledge of other countries by taking up short- or long-term assignments abroad. In future years information on both these subjects will be developed still further.

As in previous years a report is given on UNESCO's annual survey of foreign student enrolments at universities and other institutions of higher learning throughout the world. This year's survey, the fourth to be undertaken, relates to enrolments during the year 1954-55, and shows an estimated total of 126,000 students at higher educational institutions in countries other than their own. Information was collected from 56 states and non-self-governing territories.

SUPER, D. E. *The Psychology of Careers*. New York 16: Harper and Brothers. 1957. 374 pp. \$5.75. Psychologists, economists, and sociologists in recent years have built up a remarkable body of data and opinion on the nature of work, career patterns, and the techniques of psychology and guidance. This book integrates the substance of such significant research and theory development with many of the author's own findings.

Work looms larger than anything else in the daily life of the average employed adult; it is something he enjoys, complains about, and takes for granted. Yet work and careers are so little understood that society is constantly plagued by problems related to them. It is the thesis of this book that these problems can no longer be handled by "common-sense" methods. The insights gained from the experience of social scientists and psychologists must be used in solving the problems of vocational adjustment, the choice of jobs, and adjustment to work.

The author begins by explaining the nature of work. He analyzes the reasons why people aspire to certain occupations; what problems they encounter in entering and adjusting to the world of work, and why some people like to work while others do not. He discusses the place of work in the life span, the career, viewing it not only as a major factor in human life but also as one that changes as the individual progresses through life. He also reviews the value and influence of aptitude testing and the merit of vocational guidance programs and personnel services.

TALLANT, ROBERT. *Evangeline and the Acadians*. New York 22: Random House, 457 Madison Ave. 1957. 189 pp. \$1.95. The tragic story of the Acadians has been immortalized in Longfellow's narrative poem *Evangeline*. Much of the poet's account was fictional. But in *Evangeline and the Acadians*,

the author tells with drama and sympathy what actually happened to the ill-fated French colonists of Acadia.

These colonists, simple but hardy farmers and fishermen from France, had settled Acadia (we know it as Nova Scotia) in 1604. They were a hard-working, frugal people, but also gay and fun-loving. On the new continent they seemed to have found a secure and happy life. Then came the invading English. They conquered the Acadians, and an abiding hatred built up steadily between the two peoples. Finally, in 1755, the English drove the Acadians from their beloved country. They loaded the unfortunate victims onto ships, often cruelly separating the men from their families. Nearly seven thousand exiles were deposited at spots along the eastern coast of North America, from Massachusetts to Georgia.

For years the homeless Acadians wandered. Some finally reached France, and others made their way to the French West Indies. But most of them headed south for New Orleans, where they might find a haven among French-speaking people. And in Louisiana the travel-weary Acadians at last did find happiness. Today half a million descendants of Acadian exiles live there. They are still farmers and fisherfolk, still fun-loving people rich in their special customs and traditions.

TANNENBAUM, BEULAH, and MYRA STILLMAN. *Understanding Maps*. New York 36: Whittlesey House, McGraw-Hill Book Company. 1957. 144 pp. \$2.75. Here is fascinating information about all kinds of maps and how they are made, read, and used—an inclusive combination of the science of map making, the social importance of maps, and the fun of maps. Simple experiments show how to estimate distance, use landmarks, find the height of objects too tall to measure in more usual ways, use solar time in measurement, plot weather maps, understand the use of sextants and other instruments, and actually make a compass. The many pages of pictures and the easy-to-understand charts and diagrams are accurate and exciting.

TAUBES, FREDERIC. *The Art and Technique of Portrait Painting*. New York 16: Dodd, Mead and Company. 1957. 113 pp. \$4. All information essential to the portrait artists will be found here. The author delves helpfully into the matter of painting materials—canvas, panels, paints and diluents—as well as the technique of achieving expert results in composition. Each subject, from the choice of colors and preparation of the canvas to the preservation of a painting, from the lighting and placing of the model to the development of a correct likeness, is covered in detail. The book is profusely illustrated with drawings and with halftone plates which deftly delineate the important stages in a portrait's evolution. Surely all serious art students should have this stimulating and informative guide at close hand.

The author is an eminent authority on oil-painting technique as well as a creative artist of great versatility and resourcefulness. He is a contributing editor to the *American Artist* magazine; his paintings are owned by twenty-five of the country's leading museums and public collections, and his work has been exhibited in more than eighty one-man shows in the U. S., twenty of which were in New York City. The success of his earlier books has established him as an accurate and concise writer, and his wide experience in teaching art makes him an ideal author for art handbooks.

TEAL, EVELYN. *Flying Snowshoes*. Caldwell, Idaho: The Caxton Printers, Limited. 1957. 181 pp. \$4. John "Snowshoe" Thompson was a true, historical character who, for twenty years, carried the mail on skis across the

Sierra Nevada Mountains from Placerville (old Hangtown) to Genoa in the Carson Valley (the former Mormon Station, oldest settlement in the state of Nevada). Hearing that the people living east of the mountains had petitioned the government to keep the mails coming through during the winter months, when they were otherwise completely isolated by snow-blocked roads, Thompson offered his services, volunteering to make the trip on his homemade snowshoes (they were really skis weighing twenty-five pounds). Having convinced himself he could make the trip, Thompson shouldered a pouch containing mail and supplies which weighed from sixty to one hundred pounds. His only food for the journey was beef jerky and a few biscuits, and he carried no blankets, not even a coat for warmth. His timetable called for three days going and two days returning, and this never varied. The distance was ninety miles between posts (Genoa and Placerville).

Because his original contract was not properly drawn and because there were numerous delays on the part of the government, John "Snowshoe" Thompson was never fully compensated for his work of delivering the mail. And when he died suddenly in 1876, his claims were not pressed.

THANE, ELSWYTH. *Homing*. New York 16: Duell, Sloan and Pearce. 1957. 282 pp. \$3.95. When Evadne arrived at Williamsburg as Stephen Sprague's bride in the autumn of 1938, the long family history in the little Virginia town was a new and fascinating story to her. She knew that Stephen's cousin Jeff Day, now a foreign correspondent in London, looked exactly like the portrait of his eighteenth-century grandfather Julian. She knew that the lines of cousinship between the Days and the Spragues were intertwined by marriage.

But Evadne made a new discovery when she noticed that the portrait of Grandfather Julian's wife Tibby looked exactly like her own niece Mab, who had never been to Williamsburg, but who at thirteen knew the family chronicle by heart and had always had an enormous curiosity, sort of nostalgia, for the town where her ancestors had lived. Mab was only one-quarter American. But it often seemed to them in England that in some rather spooky way Mab could remember Williamsburg. They did not know that Jeff had already noticed it himself and had even told Mab about it. His wife Sylvia accepted the strange situation with no apparent reservations—she and Mab were the best of friends.

UPTON, MONROE. *Electronics for Everyone*. New York 22: New American Library of World Literature, Inc. 1957. 304 pp. 50¢ The story of electricity in action. Television, color television, radio, hi-fi, radar—what they are and how they work.

VIKSTEN, ALBERT. *Gunilla*. New York 17: Thomas Nelson and Sons. 1957. 160 pp. \$2.75. The polar bear cub was a problem. The man felt there was no place for pets in the austere life of a Spitsbergen trapper. Of course, there was his dog, but Wulf was his partner in the business of collecting pelts.

But the man, the bear and the dog become firm friends. Gunilla and Wulf shared his life and were such satisfactory companions that when the first hunters came to the island the next summer, the trapper felt that they were intruders.

Then one dark morning, the full-grown bear turned on her master and his dog. After the savage battle she left the cabin forever.

Though Gunilla had gone back to the world of bears, she stayed close to the home of the man who had befriended her. He saw her hunting, mating, and rais-

ing her cubs. When another summer brought the hunters north and the bear's life was threatened, she turned to her friend again for protection.

Suddenly Gunilla disappeared. The trapper and his dog spent days wandering through valleys, across glaciers and mountains, looking for their old friend. Not until he was homeward-bound from Spitsbergen did the man learn the final dramatic chapter of her story.

VILLERS, ALAN. *Wild Ocean*. New York 36: McGraw-Hill Book Company, Inc. 1957. 336 pp \$5. With his great love and intimate knowledge of the sea and seafarers, the author tells the heroic story of those who dared to battle the wild Atlantic to reach the New World—the Portuguese, the Spanish, and the English, of the fierce competition between countries to rule this strategic ocean, and of the successful and tragic attempts to establish colonies at Roanoke, Jamestown, and Plymouth. His story includes intriguing tales of ships seemingly swallowed up by the sea, the famous enigma of the brig *Mary Celeste*, with the author's suggested solution of the mystery, and the adventurous men and women who have sailed the Atlantic alone in small craft ranging from rubber rafts to ocean-going jeeps. Nowhere is Alan Viller's love and respect for the sea more vividly revealed than in his story of the Portuguese cod fishermen who travel to Newfoundland for the fishing season as they have for hundreds of years. They are the last dorymen on the Grand Banks—using hand lines where others use nets, proving themselves as great fishermen as they are seamen.

da VINCI, LEONARDO. *The Art of Painting*. New York 16: Philosophical Library. 1957. 224 pp. \$4.75. Of Leonardo da Vinci's paintings, only 8 survive complete. Yet he remains the supreme master of the Renaissance, and one of the most influential figures in the whole history of art.

This influence has been due, not only to his surviving masterpieces, but to his brilliant writings. Generations of aspiring artists have turned to Leonardo's *Art of Painting*, to study his mastery of anatomy and aerial perspective, his perfect blending of realistic detail with psychological penetration, and above all, his scientific approach to the art medium.

Here, then, is the book in which the master recorded his unique discoveries—those unorthodox solutions to artistic problems which painters have been rediscovering ever since.

WATSON, SALLY. *To Build a Land*. New York 17: Henry Holt and Company, Inc. 1957. 255 pp. \$3.50. The story begins in Naples in 1947 where fifteen-year-old Leo Morelli and his younger sister Mia, Italian Jews, are typical of the thieving, conniving, frightened rammuffins created by war and terrorism. Through an accident and the help of a GI, they are sent to a training camp in France to prepare them to become citizens of Israel.

The story from here on deals with many young people and many situations. Though dominating and self-willed Leo and the very dependent and fearful Mia remain central figures, we are introduced to other important people—spoiled Shari, an Indian girl who captures Mia's admiration and Leo's jealous hatred because she is so independent; Dan, the quiet Dutch boy who finds he is a pacifist and cannot fight the Arabs when they attack the children's camp near Tel Aviv to which they are all sent; and the other people in the camp, directors and youngsters, each with different problems and backgrounds.

WEICH, RONALD. *Captain of Dragoons*. New York 3: Oxford University Press. 1957. 256 pp. \$3. Captain Charles Carey of Her Majesty's Dragoons surveyed the peaceful countryside before him with disgust. There might as well

not be a war on at all, he thought. Certainly his troop had seen little action this summer in the Duke of Marlborough's campaign against the French. As if an answer to his thoughts a trumpet call broke the stillness—a French cavalry call!

Straight from victory in this skirmish, Charles is caught up in a web of intrigue and treason, when he accidentally stumbles on a meeting of French spies. His assignment to the Intelligence Staff leads to a series of perilous adventures that take him into the very fortress of the enemy.

WELLS, HELEN. *Barnum, Showman of America*. New York 3: David McKay Company, Inc. 1957. 251 pp. \$3.50. "The most typical American" is how Barnum, creator of the three-ring circus, has been hailed. From a shoeless, ingenious boy on a Connecticut hilltop to the man who dreamed up and put together "The Greatest Show on Earth," P. T. Barnum's life story is significant Americana.

Barnum started out exuberantly by being born, in 1810, on the fifth of July—which was a lucky thing for the Glorious Fourth! He managed to hold his first parade, complete with flags, songs, and cannon booming, when he was only twenty-two. His talent for discovering the strange, the bizarre, the unbelievable; his skill in bringing together the public and the personalities of the day; his showmanship soon made him the talk of both sides of the Atlantic.

WHITE, L. W., and W. D. HUSSEY. *Government in Great Britain, the Empire, and the Commonwealth*. New York 22: Cambridge University Press. 1957. 292 pp. \$2. The purpose of this book is to describe the main features of government in Great Britain, the Empire and the Commonwealth, to show the influence of tradition, precedent and proper procedure, and to illustrate the fluidity of the constitution. It is hoped that the book will make clear the duties and responsibilities of democracy as well as its privileges.

The study of the principles and practice of government attracts an increasing number of students each year. Regard has therefore been given to the syllabuses for the subjects 'British Constitution' and 'Structure and Working of Government' of the various examining bodies. Their requirements of the special syllabuses of the Cambridge Local Examinations Syndicate for Tropical Africa and Malaya have also been met. While meeting the needs of students, the authors have also had in mind the general reader, who it is hoped will find much to interest him in these pages.

In part I, which is the work of L. W. White, the emphasis throughout has been on present-day practice. It has been possible in this part to include only such references to the historical development of institutions as are essential to an understanding of the position to-day. In part II, which has been written by W. D. Hussey, the approach has necessarily been different, and the constitutional development of the British Empire from its beginnings in the seventeenth century down to the present day is described. This part relates how English representative institutions were carried overseas and adapted to the needs of government of the colonies. The institution of Crown Colony government is also described and its development is traced from non-representative forms to those leading finally to self-government. Because of the limitations of space, emphasis throughout part II has been on general principles rather than on detailed descriptions of constitutions; constitutional change to-day is so frequent that accounts of constitutions quickly become out-of-date.

WHITE, W. C., and RUTH WHITE. *Tin Can on a Shingle*. New York 10: E. P. Dutton and Company, Inc. 1957. 190 pp \$3.50. "The day was March 9 (1862)," says Bruce Catton in *This Hallowed Ground*, "memorable for the most momentous drawn battle in history—a battle that nobody won, but that made the navies of the world obsolete."

This unique book records the full story of that famed battle, of the crews that manned both gallant ships and of the events which preceded and followed the conflict.

"Just before dawn on April 12, 1861, in the harbor of Charleston, South Carolina, gunfire from Confederate batteries touched off the sweeping wildfire of civil war. It was to be a war of land campaigns sending men deep into the South past hitherto obscure towns: Chancellorsville, Manassas, Gaines' Mill, Chickamauga, Milledgeville, Appomattox. The history of the Civil War rings with their names and with the steady beat of marching armies."

WOOFER, T. J. *Southern Race Progress*. Washington, D. C.: Public Affairs Press. 1957. 192 pp. \$3.50. What the author has written in this book is, in a sense, the autobiography of the Southerner who, long before the Supreme Court, was concerned about the tragic lapses which segregation shielded so often and so long. It is, however, the autobiography also of a Southerner named after Stonewall Jackson who has always loved the South in which he labored as a good deal more than merely a scientific sociologist to understand and aid the underpeople.

Pamphlets for Pupil-Teacher Use

Administration of the School Food Service Program. Sacramento: California State Department of Education. 1957 (March). 82 pp. Includes regulations, policies, records, reports, and basic procedures useful in accounting for receipts and disbursements, in preparing monthly financial statements, and in maintaining other controls concerning the business aspects of school food service occupations.

All Together Now! Plainfield: New Jersey Secondary School Teachers Association, Lester D. Beers, Treasurer, 1035 Kenyon Avenue. 1957. 64 pp. \$1. The association's 1957 yearbook devoted to "Getting and Keeping Support for Public Secondary Education."

ALWAY, L. D. *Will You Make a School?* New York 16: National Child Labor Committee. 1957. A new pamphlet on experimental schools for children of migratory agricultural workers.

American Cooperation with Higher Education Abroad. Washington 25, D. C.: Supt. of Documents. 1957. 221 pp. 75¢. A survey of current programs by Paul S. Bodeman with specific emphasis on those programs that lead to the establishment abroad of new centers of learning or the development of existing ones.

ANDERSON, M. H.; O. R. GERAKIS; and O. M. HAUGH. *Books About Occupations: A Reading List for High School Students*. Lawrence: Dean of School of Education, University of Kansas. 1957 (April). 48 pp. Free. A classified, annotated bibliography of reading materials about vocations for high-school student use, including autobiographies and biographies, fiction, and the expository type about occupations.

Annual Report. Dover: Delaware State Department of Public Instruction. 1957. 189 pp. Annual report for the year ending June 30, 1956.

Annual Report. New York 36: Joint Council on Economic Education, 2 West 46th Street. 1957. 28 pp. The annual report of the Council for the school year 1955-56.

Annual Report. New York 29: The National Council on Alcoholism, Inc. 1956. 16 pp. Most people are able to control their consumption of alcohol. Seventy million Americans drink, but one in 15 of these develops the disease of alcoholism, which he is powerless to control by himself. Alcoholics in the U. S. alone total 4,589,000. Only a small percentage are the visible skid-row type. Approximately 85% of this country's alcoholics are to be found in their homes and the places where they make their livelihood leading apparently routine lives. Every business or social circle has at least one alcoholic. Industrial wage losses through absenteeism due to alcoholism are estimated at 432 million dollars a year. And the further economic loss due to personal and professional deterioration is beyond calculation.

Annual Report, 1956. New York 22: The Ford Foundation, 477 Madison Avenue. 1957. 286 pp. The annual report of the activities of the Foundation, the largest of single philanthropic foundations in the world, for the fiscal year October 1, 1955 to September 30, 1956.

Answer Your Engineering Manpower Problems. Washington 25, D. C.: The National Committee for the Development of Scientists and Engineers. 1957. 16 pp. Directed to the employer. Also available from the same source are an 8-page folder—*About To Choose Your High School Courses?*—directed to the high-school students—, and *Improving Science and Mathematics Education in Elementary and Secondary Schools.*

ARBUCKLE, D. S. editor. *The Classroom Teacher as a Guidance Worker.* Boston 15: Boston University, School of Education, 332 Bay State Road. 1957. 48 pp. \$1. This is the April issue of the Journal of Education composed of four chapters: "The Teacher as a Guidance Worker," "The Teacher as a Counselor," "The Teacher's Use and Understanding of Tests," and "The Teacher's Role in Vocational Guidance."

BETTS, E. A. *Success Levels for Retarded Readers.* Haverford, Pennsylvania: The Betts Reading Clinic, Publications Department, 257 West Montgomery Avenue. 1957. 5 pp. 40¢. Reprinted from *Education* (March, 1957). Recommends establishing levels for the pupil, thus encouraging him to improve.

CALIFORNIA COUNCIL ON TEACHER EDUCATION. *Toward Better Teachers.* Sacramento: California State Department of Education. 1957 (April). 48 pp. A study of the adequacy of teacher education in California; an assessment of the instruments and methods used in the preservice preparation of teachers.

Career Opportunities with the Airlines. Washington 6, D. C.: Air Transportation Association of America, 1107 16th Street, N. W. 1957. 81 pp. Free. Gives information about representative airline jobs so that a student may know what the career possibilities are in air transportation and what the qualifications, salaries, and benefits are for an airline career. It points out the importance of a good education and a good character for success with the airlines. Also, it tells somewhat of the history of air transportation.

CASTLE, MOLLY. *Get Your 40 Winks.* Montclair, New Jersey: The Economic Press. 1956. 16 pp. Describes ways in which people can get their sleep naturally, without the aids of drugs, etc.

Children Together—Integration in Public Education. New York 28: American Jewish Congress, 15 East 84th Street. 1957. 64 pp. \$1. A manual on integration in public education offering assistance to educators, adult discussion groups, community organizations and community leaders in an understanding and solution of this problem.

The College Entrance Examination Board. Princeton, New Jersey: College Entrance Examination Board, c/o Educational Testing Service, Box 592; or Box 27896 Los Angeles 27, California. 1957. 148 pp. 50¢. The 55th annual report (1956) of the Director.

COMMITTEE ON CIVIL DEFENSE AND VOCATIONAL EDUCATION. *Civil Defense and Vocational Education.* Washington 5, D. C.: American Vocational Association, 1010 Vermont Avenue, N. W. 1957. 28 pp. Points up and emphasizes the importance of and need for civil defense, and spells out the relationship of vocational education to the total education progress in civil defense.

A Control Program for Motor Vehicle Fleets. New York 38: Association of Casualty & Surety Companies, 60 John Street. 1957. 24 pp. An outline telling how to inaugurate and administer fleet safety control programs. "Proper consideration for the selection, scheduling, routing and maintenance of equipment, and supervision of drivers," the booklet says, "will result in a smooth, well-knit operation and achievement of management's goals, ultimately expressed on profits."

A Critical Analysis of Driver Education Research. Washington 6, D. C.: National Commission on Safety Education, 1201-16th Street, N. W. 1957. 60 pp. 75¢. A critical analysis of existing and current studies as to the effectiveness of driver education programs in secondary schools. Section I defines the problem and outlines the genesis of the project; Section II summarizes the research on the problem of youth and accidents; Section III presents previous analyses of driver education research; Section IV outlines problems in experimental design; Section V classifies and discusses how problems of experimental design were met; Section VI presents the studies in summary form; and Section VII offers summary and conclusions.

Developments of Lifetime Reading Habits. New York 18: National Book Committee, 24 West 40th Street. 1957. 12 pp. A report of a symposium on this subject. A reprint from the February 1957 *Wilson Library Bulletin*.

DOUGLAS, M. P. *The Pupil Assistant in the School Library.* Chicago 11: American Library Association. 1957. 68 pp. \$1.25. A simple guide as to services pupils can render to the library; also contains concrete suggestions for systematically developing a program.

DUNKLE, D. H. *The World of the Dinosaurs.* Washington, D. C.: Smithsonian Institution. 1957. 24 pp. Pictures and describes the highlights of the discoveries of scientists in their study of dinosaurs over the past 100 years.

Education in Turkey. New York 22: Turkish Information Office, 444 East 52nd Street. 1957. 24 pp. Discusses the historical background, theory and method, the school system, adult education, training of teachers, and organization and administration.

Educational Exchange Grants. Washington 25, D. C.: Supt. of Documents. 1956. 28 pp. 15¢. Discusses the program, opportunities, and how to apply for selection.

The Elementary School Program in California. Sacramento: California State Department of Education. 1957. (April). 62 pp. A handbook for the orientation of teachers.

The Encyclopedia—A Key to Effective Teaching. New York 1: The American Textbook Publishers Institute, P. O. Box 133. 1957. 48 pp. Free. Contains many ideas for the use of the encyclopedia in schools at all grade levels. Teachers and librarians will find it very useful.

EVANS, B. H. *Natural Air Flow Around Buildings.* College Station: Texas Engineering Experiment Station, Texas A & M College. 1957. (March) 19 pp. Presents some basic facts about the movement of air around simple, single building shapes. Illustrated.

Financial Transactions Concerning School Districts in California. Sacramento: California State Department of Public Instruction. 1957. 305 pp. Annual report for the fiscal year 1955-56 of California school districts.

FJELSTAD, R. S. *Carleton Continues To Study Teacher Education.* Northfield, Minnesota: Carleton College. 1957. 23 pp. An evaluation of the college teacher training program.

47th Annual Report. New Brunswick, New Jersey: National Council Boy Scouts of America. 1957. 302 pp. The 47th annual report of the Boy Scouts of America for the year 1956. As one reads these pages he is impressed with the outstanding progress that has been made in all fields of endeavor. Gains in membership; progress in program development and activities; continued good relationships with America's churches, schools, and other community institutions have been most reassuring. The record of increased camping and leadership training represents a high level of accomplishment.

The Home Study Blue Book. Washington 5, D. C.: National Home Study Council, 1420 New York Avenue, N. W. 1957. 32 pp. More than 1,500,000 persons are pursuing private home study courses this year, according to this pamphlet. Approximately 75 percent of the correspondence courses being taken are vocational in nature. More than 44,000 new students enrolled last year in engineering and related subjects. Radio television and electronics are among the most popular courses. This *Home Study Blue Book* is a directory of those private home study schools meeting NHSC's high ethical, educational, and business standards. The book contains a classified breakdown of the hundreds of correspondence courses available, and 61 pages of data on apprentice training and other occupational information. Free copies are available to placement and guidance personnel, educators, training and personnel directors.

HOPPER, S. H., editor. *Today's Challenge: Tomorrow's Citizen.* Saint Paul, Minnesota: Office of Research and Curriculum. The Saint Paul Public Schools, 647 City Hall. 1957. 37 pp. \$1. An account of a study conducted in the public secondary schools of St. Paul to ascertain the causes leading to pupil dropout, and of a search for means of improving the holding power of these schools.

How Industry and Education Can Work Together. Washington 6, D. C.: Manufacturing Chemists Association, Inc., 1625 Eye Street N. W. 1957. 40 pp. A book written for and to industry people to give them enough knowledge of schools and how they operate so that cooperation between industry and education will be welcomed and effective. In other words, the book has been written to better mutual understanding, to help improve education, and to inspire the education of new chemists, engineers, and scientists. Also available from the

same source is *The Chemical Industry Facts Book* (1957. 159 pp \$1.25) and a *Teachers Guide* (20 pp.). This book has been written to provide a better understanding of the dynamic phenomenon in the chemical industry—an understanding based on facts concerning the origins, the operations, the people, the accomplishments, and the goals of this basic industry.

How To Drive. Washington 6, D. C. American Automobile Association. 1957. 128 pp. A practical driver's guide, featuring ways to save money, to increase motoring enjoyment, to stay accident-free, and to learn more about expressway driving. This should be required reading for every driver of a motor vehicle. Attractively and helpfully illustrated.

How To Plan and Publish a Mimeographed Newspaper. Chicago 31: A. B. Dick Company, 5700 West Touhy Avenue. 1957. 24 pp (8½" x 11") Free. This new booklet for high-school students and editors of club or association publications, gives concise instructions on mimeographing and stencil layout and fundamental techniques of journalism. Under production techniques, the reader is told how to mimeograph in color, produce original artwork and insert prepared illustrations, a lay out two and three-column papers, and many other tips. The journalism section discusses such topics as writing a newspaper, reporting an interview or press conference, filling the editor's chair, and developing news sources.

HUTCHINS, C. D.; A. R. MINSE; and EDNA D. BOOHER. *Trends in Significant Facts on School Finance*. Washington 25, D. C.: Supt. of Documents. 1957. 85 pp. 60¢. Selected tabular information on school finance and on certain other related items necessary to the interpretation of school finance data. Charts show trends from the school year 1929-30 to 1953-54 inclusive and some as late as 1956-57.

India. Washington 25, D. C.: Department of State; U. S. National Commission for UNESCO. 1957 (February). 36 pp. S. C. Allyn reports on his trip to India. Largely pictorial (many pictures in color). Published by the National Cash Register Company of Dayton, Ohio, as a special issue of its *NCR Factory News*. Also available from the same source is *Questions and Answers about UNESCO*. (26 pp.)

Investment in Tomorrow. Dearborn, Michigan: Charles F. Moore, Jr., Vice President, Public Relations, Ford Motor Company. The American Road. 1957. 14 pp. Free. An address by Henry Ford II, before the Wharton School of Finance and Commerce Alumni Society of the University of Pennsylvania.

Job Horizons for the College Woman. Washington 25, D. C.: Supt. of Documents. 1956. 55 pp. 25¢. Discusses job possibilities in 20 fields. Also discusses job-finding techniques, the job market, earnings, and woman's part in the world of work. Also from the same source are: *Employment Opportunities for Women Mathematicians and Statisticians*. (1956. 43 pp 25¢.) and *Occupational Information for Counselors: An Annotated Bibliography*. (1956. 20 pp. 15¢.)

JOHNSON, ALBERT. *Roger Williams and Mary*. New York 10: Friendship Press, 257 Fourth Avenue. 1957. 48 pp. 75¢. A play for three characters.

JUNIOR HIGH SCHOOL MATHEMATICS CURRICULUM COMMITTEE. *A Guide to Mathematics*. Philadelphia: Board of Public Education. 1957. 155 pp. This fourth edition for grades seven and eight incorporates the best thinking and suggestions on this subject. Exploration of various areas of mathematics is provided in this course of study.

KLEIN, T. S. *Our Public Schools: Cerebral Palsy Units*. New York: City Board of Public Education, Division of Welfare. 1957. 52 pp. This is an annual report for the school year 1955-56 on New York City's program of education for crippled children.

LAFITTE, LUCETTE. *Fetes de France*. New York 22: Cambridge University Press, 32 East 57th Street. 1957. 64 pp. 50¢. A description of a French national celebration written in simple French.

Leadership Role of the Principal. Philadelphia 4: University of Pennsylvania. 1957. 14 pp. (8½" x 11"). \$1 each; 10 or more copies, 75¢ each. A cooperative study made by the Philadelphia Suburban School Study Council, Group "A", in cooperation with the Educational Service Bureau of the School of Education, University of Pennsylvania. Enumerates 4 major functions as responsibilities of the principal—supervision and improvement of instruction, leadership in personnel relations, administration of routine duties, and development of community and public relations. Under each in the order listed above are, respectively, 10, 12, 11, and 8 duties. Also, 7, 5, 3, and 7 tools, respectively, needed to implement each of the four listed major functions. Listed also are 6 statements, which if adequately met, will enable him "to become the ideal educational leader." Also included is a suggested device for appraising the effectiveness of the administration of a school.

The Life Insurance Public. New York 22: Institute of Life Insurance, Division of Statistics and Research, 488 Madison Avenue. 1957. 64 pp. Gives the results of the first nation-wide survey devoted to life insurance ownership.

LITTLE, SARA. *Your Guide on Race Relations*. New York 10: Friendship Press, 157 Fourth Avenue. 1957. 48 pp. 50¢. Suggests ways of discussion. Also available from the same source are: *Sense and Nonsense About Race* by Ethel J. Alpenfels (1957. 64 pp. 50¢), *What Can We Do?* by Ruth D. See (1957. 64 pp. 60¢), and *This Is Japan* by William Oxling (1957. 24 pp. 50¢).

MAEDA, FRANCES. *When We Share*. New York 10: Friendship Press, 257 Fourth Avenue. 1957. 64 pp. 65¢. Material for use of young people to develop the attitude of sharing with people of other races and nations.

National Stay-in-School Campaign Handbook for Communities. Washington 25, D. C.: Publications Services, Office of Education, Department of Health, Education, and Welfare. 1957. 28 pp. A limited number of copies of the handbook are available without charge. Copies may be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 15 cents for single copies, with a 25% discount on orders of 100 or more copies.

A manual full of practical suggestions for a "Stay-in-School" campaign. A "how-to-do-it" handbook.

NATO—*Shield of Freedom*. New York 21: American Council on NATO, Inc. 1957. 16 pp. Explains the what and why of NATO, how it works, and its future.

A New Source of Educational Motion Pictures. Bloomington: National Educational Television Film Service, Audio-Visual Center, Indiana University. 1957. 6 pp. Free. Describes this new source.

The One Voice That Speaks to Millions, Instantaneously. New York: National Broadcasting Company. 1957. 32 pp. Free. Contains case histories with statistics and results for ten individual projects as well as a complete list of all the public-service and fund-raising drives in which NBC participated during 1956.

Operation Outdoors. Washington 25, D. C.: Forest Service, U. S. Department of Agriculture. 1957. 16 pp. A realistic appraisal of the rising need for sufficient outdoor recreational outlets for the American people since it is estimated that 66 million visits will be made to our National forests by 1962. Other publications available from the same source are: *People and Timber* (16 pp.); *Waters of Coweeta* (24 pp.); *How Man Starts New Forests* (4 pp.); *Visual and Auditory Aids for Teaching Conservation* (4 pp.); *Suggested Questions for a High School Conservation Quiz* (4 pp.); *Forest Insects and Diseases* (8 pp.); *Conservation Activities for Young People* (24 pp.); *Forest Service Films Available on Loan* (20 pp.); *Highlights in the History of Forest Conservation* (23 pp.); *Some References on Forests and Related Natural Resources* (12 pp.); *Forests and the Natural Water Cycle* (4 pp.); *What the Forester Does for Wildlife* (4 pp.); *Know Your Watersheds* (16 pp.); *Materials To Help Teach Forest Conservation* (4 pp.); *Opportunity for You* (6 pp.); *Suggestions for Integrating Forestry in the Modern Curriculum* (4 pp.); *How Much Timber Do We Have?* (4 pp.); *How Good Is Our Timber?* (2 pp.); *What Kind of Trees Do We Use?* (2 pp.); *How Much Timber Will We Need?* (4 pp.); *How Much Forest Land Do We Have?* (2 pp.); *Who Own Our Forest Land?* (4 pp.); *Small Forests Are Important* (2 pp.); *We Cut More Wood Than We Use* (4 pp.); *How Much Wood Do We Use?* (4 pp.); *How Well Is Our Timber Protected?* (4 pp.); *Our Tree Planting Job* (4 pp.); *How a Tree Grows* (2 pp.); and *The Tree and the Soil*. Single copies of each of these publications are free to teachers.

Paperbound Books in Print. New York 36: R. R. Bowker Company, 62 West 45th Street. 1957. 185 pp. \$2 per single issue; \$3 for a subscription to both the current issue and the forthcoming Fall-Winter 1957 issue. In response to the eager reception of thousands of readers who are discovering the advantages of inexpensive paperback books, more and more fine volumes are constantly appearing in paper editions. As a guide for these readers to over 6,000 available paperbacks, this catalog indexes the top-quality reprints and more than 1100 "originals" (i.e. books that appear only in paper) of over 90 different paperback series.

Priced mostly from 25¢ to \$1.25, the books are indexed by author, by title, and selectively by subject, with complete information on publisher, price, and how to order. The subject index, in particular, reveals the wide range of high quality books that are now available in paper editions to the general reading public: 370 classified under literature, 180 under biography and autobiography, 220 under drama, 138 under history, 456 under fiction representing both the titles now available and those scheduled to appear in the months ahead. These are just a few of the more than 60 categories under which the books are grouped.

PATTERSON, REBECCA, editor. *The Educational Leader*. Pittsburg: Mailing Department, Kansas State Teachers College. 1957. (April). 53 pp. Free as long as supply lasts. Discusses guidance services in Kansas public secondary schools and includes two talks given during Religious Emphasis Week on the campus of the college.

Personal Income in Maryland Counties, 1957-1955. College Park, Md.: Bureau of Business and Economic Research, University of Maryland. 1957. (March). 20 pp. Study reveals that in 1955 twenty per cent of the personal income of the state is spread thinly over 19 counties. Baltimore City, Anne Arundel, Baltimore, Montgomery, and Prince Georges Counties account for the

other 80 per cent. From 1950 to 1955 half of the counties of Maryland lost population.

POTTER, D. M. *People's Capitalism*, Part I. New York 36: The Advertising Council, 25 West 45th Street. 1957. 60 pp. 25¢. Yale University and the Advertising Council jointly attempt to achieve an authoritative consensus of what are, precisely, our economic ideas and institutions, how they relate to our political and social ideas and institutions, and what they bring to man's fulfillment. Through the procedure of the American Round Table, thoughtful and informed individuals from the fields of management, labor, religion, economics, and political science gathered together at New Haven to make an effort to develop a true picture of America's unique economy and its contribution to our well-being.

The Preparation of Teachers To Meet the Changing Demands of the Future. Washington 6, D. C.: Council on Cooperation in Teacher Education of the American Council on Education, 1785 Massachusetts Avenue, N. W. 1957. 42 pp. Papers presented at the Fifteenth Annual Meeting at Hotel Shoreham in Washington, D. C., November 8-10, 1956.

Program Activities of the National Science Foundation. Washington 25, D. C.: National Science Foundation, 1520 H Street, N. W. 1957. 16 pp. Free. Outlines briefly the current programs of the Foundation.

REASON, P. L., et. al. *Financial Accounting for Local and State School Systems*. Washington 25, D. C.: Supt. of Documents. 1957. 255 pp. \$1. Composed of six parts: Receipt Accounts, Expenditure Accounts, Clearing Accounts, Analyzing Expenditures, A Guide for Recording Receipts and Expenditures, and Financial Accounting Terminology. A guide for determining per pupil expenditures, suggested methods for prorating expenditures, an index for recording specific receipts and expenditures, and detailed criteria for classifying items as supply or equipment.

RESEARCH DIVISION OF THE NEA. *The 1957 Teacher Supply and Demand Report*. Washington 6, D. C.: National Commission on Teacher Education and Professional Standards of the NEA, 1201 Sixteenth Street, N. W. 1957. (March). 56 pp. Report of the tenth annual national teacher supply and demand study reprinted from the March 1957 *Journal of Teacher Education*. Includes state-by-state tables portraying conditions today. Also available is a 32-page summary, separately bound.

ROBERTS, H. L., et al. *Decisions . . . 1957*. New York 17: Foreign Policy Association, 345 East 46th Street. 1957. 102 pp. 35¢. A survey of the eight questions most likely to confront the American people this year. These questions are: "How Should U. S. Compete with Russia?" by Henry L. Roberts; "What U. S. Policy for Europe—and Germany?" by M. S. Handler; "What U. S. Stakes in Middle East?" by T. Cuyler Young; "Should U. S. Deal with Red China?" by A. Doak Barnett; "U. S.—For or Against 'Colonialism'?" by Rupert Emerson; "Are 'Neutralists' Against U. S.?" by Paul Arthur Schilpp; "What U. S. Military Strategy in the Nuclear Age?" by Mark S. Watson; and "How Much Trade—How Much Aid?" by Max F. Millikan.

RUFVSOLD, M. I., and ADELE HART. *Secondary School Library Personnel and Standards in Indiana*. Bloomington: Indiana University Bookstore. 1957. (May). 64 pp. \$1. Presents a statistical description of the status of high-school librarians in Indiana, indicating developments in terms of certification requirements for librarians and standards for school library service.

Data based on the school year 1952-53 with comparisons made with the findings of the same type of studies of 1943-44 and 1947-48.

SCHWEITZER, PAUL, and D. W. LEE. *Herbrace Vocabulary Workshop*. New York 17: Harcourt, Brace and Company. 1957. 128 pp. \$1.48. A workbook for the twelfth grade based on the principle that words are best learned when studied as tools for communicating ideas. Composed of 14 chapters, 75 exercises, a subject-content index, and a 32-page booklet of tests.

The Seal of the United States. Washington 25, D. C.: Supt. of Documents. 1957. 16 pp. 30¢. Describes the history, use, and design of the Great Seal and contains a full color reproduction of the Great Seal, approximately four inches in diameter, suitable for framing.

Second Injury Funds. Bureau of Labor Standards Bulletin No. 190. Washington 25, D. C.: Bureau of Labor Standards, Paul E. Gurske, Director, U. S. Department of Labor. 1957. 70 pp. Free. Discusses standards and patterns of second injury funds under State workmen's compensation laws. The report explains what a second injury fund is and how it promotes employment of the physically handicapped. It tells how, when, and where such legislation began. It discusses the benefits of such funds from the point of view of the disabled worker and from that of the employer. The bulletin includes a comprehensive table giving the current status of second injury fund provisions under the workmen's compensation law of each of the 43 States now having such a fund.

Also available from the same source is the 125-page pamphlet entitled *Federal Labor Laws and Agencies—A Layman's Guide* (Bulletin No. 123 Revised). This bulletin brings together under one cover information on the major Federal labor laws and the agencies administering them. The summaries of the laws contained in the publication are brief and nontechnical, and are designed to furnish general information on Federal labor laws.

STEAD, W. H. *Economic Problems of Natural Resource Use*. New York 36: Joint Council on Economic Education, 2 West 46th Street. 1957. 64 pp. \$1.25. This publication focuses attention on urgent questions with a unique point of view, declaring, "It is not an absolute shortage of anything we face. What we face is a threat of slowly fading supplies which, if not compensated for, can raise costs to the point where the increases in our standard of living will be brought to a halt." Thus, "the problems lie . . . in costs, in organization and in management." It is largely an economic problem which every individual citizen, government and private business must tackle with gravity and, most important, with intelligent understanding.

This publication, designed as a background book for the teacher of any grade level, qualifies also as a text for high school students. Clear, nontechnical language is used throughout the text. Numerous charts illustrate the United States' increasing consumption of resources, our growing dependence upon other countries, and the shifting pattern of United States energy sources. Included is a study guide by George L. Fersh, Director, Resource Use Education Project.

The Story of Taxes. Wilmington 98, Delaware: E. I. DuPont DeNemours and Company. 1957. 32 pp. Free. Points out that present tax laws threaten to slow or cripple the nation's potential for growth, and thus undermine the potential for tax cuts.

Teaching About Cancer. New York 19: American Cancer Society, 521 West 57th Street. 1957. 48 pp. Free. A guide to source materials and information prepared to help secondary school administrators and teachers in developing instruction on cancer suitable to their curriculum requirements.

Textbooks in Print 1957. New York 36: R. R. Bowker Company, 62 West 45th Street. 1957. 243 pp. \$2. This is an author and title index to elementary, junior, and senior high school books classified by subject with supplementary readers and pedagogical books. This 1957 edition is up to date to January, 1957.

They Went to College Early. New York 21: Fund for the Advancement of Education, 655 Madison Avenue. 1957. (April). 127 pp. Free. This is Evaluation Report Number 2 of the experiment under which 1350 students of high academic promise were admitted to twelve colleges and universities before they had completed high school—over a 4-year period. The study involves four groups—2 already graduated, one graduated in June 1957, and the other will graduate in June 1958. The report states: "The results to date clearly indicate that under the proper circumstances early admission to college represents a promising approach to the problem of freeing the able student from the educational 'lockstep' and helping him to realize his full potential."

TICKTON, S. G. *Rebuilding Human Lives: The Rehabilitation of the Handicapped.* New York 22: The Seventh Company, Inc., 60 East 56th Street. 1957. 64 pp. A preliminary draft of Part I of a report on the rehabilitation of the handicapped; a comparison of salaries paid rehabilitation personnel with other occupations.

Training Materials Bibliography. District Heights, Md.: John P. Eberle, Secretary-Treasurer, Training Officers Conference, 7901 Gateway Boulevard. 1957. 72 pp. \$1. A highly selected, well-annotated, bibliography covering various areas of employee training prepared to aid the training officer in his work.

TUMIN, M. T., editor. *Segregation and Desegregation: A Digest of Recent Research.* New York 22: Anti-Defamation League of B'nai B'rith, 515 Madison Avenue. 1957. 112 pp. \$2. Survey and digest of current research on segregation, desegregation, and integration of Negroes and whites. Also available from the same source are: *Regional Problems and Issues in Human Relations Education* by Gertrude Noar and Herman Case as editors. (1957. 78 pp \$1.50. Summaries of conferences held on campuses of New Jersey State Teachers College, University of Southern California, University of Oklahoma, Pennsylvania State University, and in the city of Chicago) and *Modern Education and Better Human Relations* by William Heard Kilpatrick (1957. 25 pp. 35¢. Discusses modern and traditional education and outlines a program for building democratic human relations.)

U. S. Government Awards Under the Fulbright and Smith-Mundt Acts. Washington 25, D. C.: Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Avenue. 1957. 64 pp. Lists eligibility rules and the awards available for university lecturing for 1958-59. Information for teaching in elementary and secondary schools can be secured from the U. S. Office of Education, Division of International Education, Department of Health, Education, and Welfare, Washington 25, D. C.

VOEKS, VIRGINIA. *On Becoming an Educated Person*. Philadelphia: W. B. Saunders Company. 1957. 163 pp. Discusses orientation to college with the view to helping youth solve some of the many problems encountered.

WALKER, ELINOR, editor. *Book Bait; Detailed Notes on Adult Books Popular with Young People*. Chicago 11: American Library Association, 50 East Huron Street. 1957. 96 pp. \$1.25. Contains detailed notes on adult books popular with young people. A listing prepared for use in selecting books for a special young people's collection.

WCOTP at Manila: *A Pictorial Report*. Washington 6, D. C.: WCOTP, 1201 Sixteenth Street, N. W. 1957. 32 pp. A report of the fifth annual meeting of the World Confederation of Organizations of the Teaching Profession. Delegates from 34 countries met in Manila, August 1-8, 1956, to discuss "The Teacher and the Well-Being of Society," and to elect new officers. Dr. William G. Carr, Executive Secretary of the NEA, is secretary-general of the organization.

WEBB, ROBERT and MURIEL. *The Churches and Juvenile Delinquency*. New York 7: Association Press, 291 Broadway. 1957. 64 pp. 50¢. Points up the responsibility of the churches in this problem, gives leaders a brief summary of contemporary Christian thought on this subject, and suggests some general ways in which the churches may move forward in this area.

WRIGHT, L. B., editor. *Virginia Heritage*. Washington 3, D. C.: Public Affairs Press, 419 New Jersey Avenue, S. E. 1957. 50 pp. \$1. Early Virginia history.

WRIGHTSTONE, J. W. *Class Organization for Instruction*. Washington 6, D. C.: National Education Association. 1957. 32 pp. 25¢. One of the "What Research Says to the Teacher" series (No. 13). Contains research material that is of help to classroom teachers.

Yearbook of Railroad Information. New York 6: Eastern Railroad Presidents Conference, 143 Liberty Street. 1957. 104 pp. A summary of railway operations covering a number of years.

ZAPOLEON, M. W. *The Identification of Those with Talent for Science and Engineering*. Washington 25, D. C.: National Committee for the Development of Scientists and Engineers. 1957. 76 pp. A review of existing literature on this subject as it affects guidance in the elementary and secondary schools.

News Notes

NATIONAL STAY-IN-SCHOOL CAMPAIGN

Nationally about 40 per cent of our young people fail to be graduated from high school. What proportion of the boys and girls in your community fail to obtain their diplomas? How great is the loss to your community in terms of effective citizenship and educated and trained manpower? Would you like to cut down these losses?

The Department of Labor and the Office of Education of the Department of Health, Education, and Welfare are jointly sponsoring a 1957 National Stay-in-School Campaign, with the cooperation of the Department of Defense. The National Stay-in-School Campaign *Handbook for Communities* (24 pages) is designed to help you carry on a stay-in-school campaign that will encourage boys and girls to stay in school and graduate. It contains ideas of things to do, and facts and arguments to help get the stay-in-school message across. It suggests ways of involving everyone in the community, including boys and girls, in this effort.

National stay-in-school publicity through radio, TV, and the press will reinforce local campaigns. Your local TV stations will be sent a slide that can be used in local stay-in-school programs. The National Advertising Council is giving national support that will pave the way when you seek the help of your local advertising Council and will increase acceptance of local stay-in-school activities. We hope that through efforts of all of us we can induce many potential dropouts to continue their education. Free copies of the *Handbook* will be sent to cooperating groups by the U. S. Office of Education or by Paul E. Gurske, Director, Bureau of Labor Standards, U. S. Department of Labor, Washington 25, D. C.

Also available from the U. S. Department of Labor is a 25-page mimeographed report entitled *Trend Tables on Youth Employment and School Enrollment*.

NO TEACHER ALONE

What is behind the national, state, and local organizations that unite teachers in a profession is the subject of the new National Education Association film, *No Teacher Alone*. Focused on the program and services of the NEA, this 20-minute, 16mm. color film brings home to one teacher Cleo, her part in professional teachers organizations—and their part in her life and career. Through the words of a fellow teacher, Cleo gets a down-to-earth picture of the NEA and its affiliates. Developed by Agrafilms, which produced the NEA's award winning films, "A Desk for Billie," "Mike Makes His Mark," and "Skippy and the Three R's," this new film is available free of charge through state education associations for local association viewing.

Meetings and publications are more than just words, Cleo learns. She sees that even what and how she teaches now is shaped in part by the work of education associations. Conferences and conventions, curriculum and development seminars, and all professional meetings are held to discuss new ideas and problems in education that matter personally to Cleo. *No Teacher Alone*

follows the plans and activities of a local education association in proposing a new salary schedule to its school board. Its request for help goes from Cleo's city to NEA headquarters in Washington and to the state associations. NEA research helps the local association to make its case with complete up-to-date information. School board members are prepared to listen because they have read about education and its aims in newspapers and magazines—articles that are there because of NEA and state association help. If local associations choose, they may buy a color print of *No Teacher Alone* for \$100 (black and white prints are available at \$40) and have their own credit line added at the close of the film for \$15.

CLOSED CIRCUIT TEACHING EXPERIMENT

The Fund for the Advancement of Education has allocated grants totaling almost a million dollars to public school authorities in eight major cities and two states to conduct experiments in the use of educational television in instruction to large classes in elementary and secondary schools. Dr. Alexander J. Stoddard, former superintendent of schools of Los Angeles will be the director or coordinator of the project. Recently he wrote *Schools of Tomorrow—An Educator's Blueprint* published by the Fund. This publication, which recommended the use of classroom TV as a means of improving classroom instruction in the face of teacher shortage will be used by some schools as the basis for experimentation while other schools will develop different procedures. The cities participating in the project are Atlanta, Cincinnati, Detroit, Miami, Oklahoma City, Wichita, Norfolk, Philadelphia; the states are Nebraska and Oklahoma. Each will match the money granted by the Fund. The objectives of the project are:

1. To demonstrate simplified language-teaching techniques in a two-language area.
2. To develop opportunities for participation and leadership in neighborhood life, using local resources to promote good citizenship.
3. To develop TV techniques to enrich school educational programs.
4. To test and measure the effect of a closed-circuit TV home and school communication system on the academic progress of individual children, school classes, individuals in the family, and the family as a unit.
5. To evaluate and improve the quality of the program through continuous study.

COLONIAL WILLIAMSBURG

The colonial craftsman was both retailer and manufacturer whose skilled hands and practiced eye took the place of machinery. How he made his living in the eighteenth century is the subject of Colonial Williamsburg's new film-strip, *The Craftman in Colonial Virginia*. The 44 captioned color frames follow the lives of a Williamsburg bootmaker, his apprentice sons, and other town craftsmen. The trades of the wigmaker, cabinetmaker, cooper, house carpenter, miller, bricklayer, blacksmith, silversmith, and gunsmith are also covered. The craftsmen and journeymen are shown at work on the farms and plantations as well as in their tiny urban shops. The filmstrip features Master Bootmaker Raymond Townsend and other master craftsmen of Colonial Williamsburg who today ply their trades in the free Craft Shops, using the hand tools and methods of 200 years ago.

The filmstrip is the first in a series on "Making a Living in 18th-Century America," being produced by Colonial Williamsburg as part of its educational program. Others will cover *Farming in Colonial Virginia*, *Professional Men of Colonial Virginia*, *Trade in Colonial Virginia*, and *The Citizen-Soldier in Colonial Days*.

The expanded filmstrip program of Colonial Williamsburg will cover two other series—political life and everyday life in colonial America. *Independence in the Making* has been completed and others in the political series will include *The Planter Statesmen*, *The Young Washington*, *The Young Jefferson*, and *The Virginia Declaration of Rights*. *Cooking in Colonial Days* is the first of the everyday series which will cover town and country life. These will be photographed in full color in the authentic settings in and around Williamsburg.

THE STORY OF OIL

The Shell Oil Company, 50 West 50th Street, New York 20, New York, has produced a series of five motion pictures telling the fascinating story of oil—how men search for it, bring it from the depth within the earth, transport it, change it into hundreds of useful products and how these products are distributed and sold. The "This Is Oil" series is representative of the films available in Shell's million dollar library—nationally acclaimed as the finest motion pictures of their kind. This series is in color and is non-commercial. These films are available on a loan basis. Write for list of other films obtainable from the same source.

FULBRIGHT AND LATIN AMERICAN SCHOLARSHIPS

Competitions for Fulbright and Buenos Aires Convention Scholarships for graduate study abroad for 1958-59 are now open. The Fulbright awards for pre-doctoral study and research in Europe, Asia, and Latin America cover tuition, books, and maintenance for one academic year. The Buenos Aires Convention scholarships for use in Latin America provide transportation from the U. S. government and maintenance from the government of the host country. Eligibility requirements for these foreign study fellowships are United States Citizenship, a college degree or its equivalent by the time the award will be used, knowledge of the language of the country of application sufficient to carry on the proposed study, and good health. Preference is given to applicants not more than 35 years of age.

Countries where U. S. graduate students may study under the Fulbright Act are Australia, Austria, Belgium, Burma, Chile, Denmark, Finland, France, Germany, Greece, India, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, the Philippines, and the United Kingdom. In the Asian countries, Burma, India, Japan, and the Philippines, as well as in Greece, only a limited number of grants is available, and mature graduate candidates are preferred.

Countries participating in the Buenos Aires Convention Program are Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, and Venezuela. Persons interested in these awards can receive further information by writing to the Institute of International Education or its regional office for the brochure *United States Government Grants*. Students now enrolled in American colleges or universities should obtain further information from their campus Fulbright adviser.

Competition for the 1958-59 academic year closes November 1, 1957. Requests for application forms must be postmarked by October 25. Completed forms must be submitted by November 1. The programs under the Fulbright Act and the Buenos Aires Convention are part of the international educational exchange activities of the Department of State. They will give almost 1,000 American citizens the opportunity to study abroad during the 1958-59 academic year. Since the establishment of these programs, over 6,500 American students have received grants for foreign study.

SAN FRANCISCO CONFERENCE TO LOOK AT ASIAN-AMERICAN PROBLEMS

Obstacles to better Asian-American understanding and cooperation will be examined this fall when the United States National Commission for UNESCO convenes its Sixth National Conference in San Francisco. More than 1,000 persons, including delegates from the 48 States and observers from many Asian nations, will gather in the City of the Golden Gate for what is expected to be the most important meeting ever held in the United States to explore methods of dealing with this problem. The 100 member National Commission is a body which advises the Department of State on UNESCO affairs that relate to U. S. policy.

During the three-day Conference (November 6 to November 9), hundreds of educators from schools and professional organizations will evaluate the current status of Asian studies in American schools. Panel discussions and expert work groups will attempt to formulate suggestions and recommendations which will help to give both Asians and Americans a truer picture of each other's lives and values. Included among the many educational subjects which will be considered are such topics as the study of Asia in American elementary and secondary schools, a look at Asian-American adult education programs, teacher and student exchanges between the East and the West, and possible steps to overcome the language barrier between Asia and the United States.

Looking forward then to the Conference, Willard E. Givens, former Commission Chairman, said: "In this direction, we believe, lies one of the most fruitful avenues of effort for all men of goodwill everywhere."

THE SMART SET

Of the 930 valedictorians and salutatorians reported by Kansas public and private high-school principals for 1955, about 61 per cent entered college last fall compared with 40 per cent of ALL 1955 graduates. Among reasons for not attending college were: matrimony, 32 per cent; lack of money, 18 per cent; and no desire to continue, 13 per cent. The Graduate Division, Kansas State Teachers College, Emporia, issued the report.

FILM SERIES TO STIR STUDENT INTEREST IN SCIENCE

To stimulate the interest of teenagers in science as a possible career field, the McGraw-Hill Book Company, 330 West 42nd Street, New York 36, has released a *Junior Science Film Series*, making scientific principles exciting as everyday experiences. The series, an extensive program of 39 films, each about 13 minutes in length, has been carefully planned with the junior high-school curriculum in mind. While maintaining a sound educational approach, these

films are geared to arouse in the students the advantages offered by a career in science.

Using equipment and materials readily available to students, each film deals with a basic scientific principles relating it to a student's normal day-to-day existence. For example, through the medium of film, a toy locomotive demonstrates Newton's Third Law of Action and Reaction; or children playing on a seesaw are transformed into a lever diagram; and a cowboy's lariat illustrates centrifugal force. Each topic includes interesting experiments which use only household materials and are so clearly explained that boys and girls can easily perform them at home.

The editors believe motivation towards a science career starts in the early years of a child's education. If the United States is to check the critical shortage of scientists, now and in the future, the youngsters of today ought to be exposed to the fascination, excitement, and challenge of science as a career.

ENGINEERING, SCIENCE, AND WOMEN

The complex question of women in engineering was faced April 28-May 1 by more than 100 secondary school educators at the Joint Program For Technical Education, sponsored by the Columbia University School of Engineering at Arden House, Harriman, New York. The conference, supported by the Hebrew Technical Institute of New York, considered "Education of Girls for Careers in Engineering and Science." Some informal conclusions: girls are actively dissuaded by guidance counselors from entering science and engineering. The road to an engineering degree is a tough one for a woman, not for lack of brainpower, but because of tradition barriers. Industry prejudices against hiring women engineers still exist. Women in middle and later years often return to their profession with startlingly good results, after their children are grown up. Before women in large force are in engineering, changes must be made in employment opportunities, utilization practices, education, personal values, common beliefs about women's abilities. Proceedings of this meeting, together with material from two previous conferences on "Identification and Guidance Problems in Secondary Schools" and "Science Instruction and Staffing Problems in Secondary Schools," are published by the Columbia School of Engineering.

EXTRA PAY FOR EXTRA WORK?

One of the biggest headaches facing administrators in relation to the activity program is that of scheduling necessary teacher time. More and more, teachers are resisting extraclass duties without extra pay. They point out that a full teaching load, plus test papers and assignments to be graded at night, plus the professional meetings and paper work that are part of any teacher's job, usually add up to more than a 40-hour week, and that sponsoring extraclass activities should not be required without additional pay. In a survey conducted by *Nation's Schools* last summer, 80 per cent of the superintendents queried thought that teachers should receive extra pay for responsibilities beyond the regular hours of classroom teaching. (An alternative would be to reduce the class load of those who were given special activities.)

A Pennsylvania administrator, for example, reported that his schools require "a certain number" of extracurricular hours from teachers, and that

extra pay is given for additional time beyond this requirement. A Connecticut elementary school superintendent reported extra pay for time beyond a 48-hour week. A superintendent in a large Ohio city felt that ideally the teacher load should be regulated so that extra pay would not be necessary, but that realistically it was more economical to "buy" the extra services. A number of administrators felt that if teachers received adequate pay it would not be necessary to pay them for extraclass services.

Some school systems have found a partial solution to the problem by appointing a director of activities who arranges schedules, is responsible for all the machinery of operating the program, and serves as adviser to teacher-sponsors, thus removing much of the load from the teacher's shoulders. However, like extra pay for extra work, this plan requires that funds be available for the purpose.—*Guidance Newsletters*, Science Research Associates, 57 West Grand Avenue, Chicago 10, Illinois.

WHO WOULD BE ELIMINATED?

At the University of Kansas, a study was made to determine how many of its 1955 graduates would have been denied admission had the lower half (on test scores) been excluded. The result: 208 of the 1,006 would have been denied admission. Among these would have been (judging from degrees received) 40 teachers, 22 engineers, 7 lawyers, 7 doctors, and 7 pharmacists.

Dr. George B. Smith, Dean of the University and author of the study, noted that 40 percent of entering freshmen at the university failed, for one reason or another, to achieve junior standing. "It could be contended," he said, "that this is a far more democratically-arrived-at end product of elimination than a system of entrance examinations would secure." He asserted the examinations, although they serve some useful purposes, are "exceedingly questionable" as a basis for admittance or rejection by a multipurpose State university. The study was termed "Who Would Be Eliminated?—A Study of Selective Admission to College."

GOOD READING MATERIAL

Following is a list of some articles related to education which have appeared in recent issues of a number of magazines:

"A Symposium: The Load of the Secondary School Teacher." (*California Journal of Secondary Education*, May 1957, pp. 292-315.) Presents divergent views on the best way to attain a defensible load for the secondary school teacher. . . . "What Does Research Say About the Effectiveness of the Core Curriculum?" by John M. Michelson. (*The School Review*, Summer 1957, pp. 144-160.) . . . "Do Blackboard Jungles Exist?" by Delmar C. Palm. (*The Social Studies*, May 1957, pp. 147-152.) . . . "I Would Like to Teach Another Seventy Years!" by Frederick E. Bolton. (*Ladies' Home Journal*, June 1957, pp. 44, 47-48.) . . . "Merit Salary Schedules for Teachers." (*Journal of Teacher Education*, June 1957, pp. 114-197.) A comprehensive survey including feature articles on facts and issues, difficulties, and incentives, and other articles describing schedules. . . . "Why the New Concern for Educating the Gifted?" by Clarence H. Faust. (*School Review*, Spring 1957, pp. 12-19.) . . . "Conditions Favorable and Detrimental to the Development of Talent," by Robert J. Havighurst. (*School Review*, Spring 1957, pp. 20-26.)

..... "Identifying Gifted Children," by Robert F. De Haan. (*School Review*, Spring 1957, pp. 41-48.) "Initiating an Educational Program for the Able Students in the Secondary School," by William H. Cornog. (*School Review*, Spring 1957, pp. 45-49.) "Social Values and Individual Motives: The Dilemma of the Gifted," by J. W. Getzels. (*School Review*, Spring 1957, pp. 60-63.) "A Study of the Science Programs in Twelve Iowa High Schools," by Leonard Winier. (*Science Education*, April 1957, pp. 181-190.) "Some Data on Science Instruction in Iowa High Schools," by J. W. Kercheval. (*Science Education*, April 1957, pp. 191-197.) "Turnover of High School Chemistry Teachers in Alabama—1942-1953," by Will S. De Loach. (*Science Education*, April 1957, pp. 200-201.) "The Student's Day Hasn't Changed Much—Or Enough, Either," by C. P. Hooker and C. M. Lindvall. (*Nation's Schools*, June 1957, pp. 48-49.) "Schools Help Rebuild the Neighborhood, (in Chicago)." (*Nation's Schools*, June 1957, pp. 50-55.) "Study Halls Are a Waste of Valuable Classroom Space," by Bruno A. Castile. (*Nation's Schools*, June 1957, p. 84.) "Is Your Son Being High-Pressured Into Engineering?" by Max Lerner. (*Pageant*, July 1957, pp. 12-21.) "Better Education for Nonacademic Pupils," by Kenneth N. Nickel. (*North Central Association Quarterly*, April 1957, pp. 351-384.) A study conducted and reported by the Subcommittee on In-service Education of Teachers of the North Central Association in cooperation with an advisory graduate committee of the University of Colorado. Also available in bulletin form. "The Facts About the Shortage of Science and Mathematics Teachers," by Ray C. Maul. (*Nation's Schools*, May 1957, pp. 75-77.) "Teaching General Science Through Film Production," by Carlton W. H. Erickson. (*Audio-Visual Communication Review*, Fall 1956, pp. 268-278.) "Beginning Teachers and Their Education," by Sam M. Lambert. (*Journal of Teacher Education*, Dec. 1956, pp. 347-351.) The December 1956 *Journal of Education* is devoted to "High Interest—Low Vocabulary Reading Materials," by H. B. Sullivan and L. E. Tolman. (A selected booklist which lists books by grades for grades 1 to 7, inclusive. 132 pp. \$1. Request from Boston University School of Education, 332 Bay State Road, Boston 15, Massachusetts.) The December 1955 issue of *The Bulletin of the Michigan Secondary School Association* is devoted to "Home and Family Life Education." "A Study of the June 1955 Graduates of Public High Schools in Certain California Counties." (*California Schools*, Dec. 1956, pp. 417-430.) "School Administration Has Changed," by E. O. Melby and E. D. Gizzell. (*Nation's Schools*, Jan. 1957, pp. 42-45.) "Ask Someone Who Knows," (Answer to Bestor's in *U. S. News and World Report*. Reprints available from *Nation's Schools*. Jan. 1957, pp. pp. 33-34. Also see same issue of *Nation's Schools*, pp. 117-118 by Edgar Fuller.) "The Superior Child Enterprise," by Vera Miller. (*School Board Journal*, April 1957, pp. 43-46.) Describes an experiment in various types of grouping in two schools with fourth grade. "The Bay City Experiment, as viewed by the Staff of the City Schools," by Paul W. Briggs, Superintendent of Schools of Bay City. (*The Journal of Teacher Education*, March 1957, pp. 3-6.) "The 1957 Teacher Supply and Demand Report," by the Research Division of the NEA. (March 1957, pp. 17-66.) The March 13, 1957 issue of *The Educational Research Bulletin of Ohio State University* (Room 203, College of Education, Columbus, Ohio, pp. 59-130) is devoted to the subject of Broadcasting.

SUMMER ORIENTATION PROGRAM TO AID SEPTEMBER FRESHMEN

A summer orientation program was launched by the University of Michigan in July. It was designed to aid incoming freshmen in selection of programs of study and to facilitate their counseling by faculty members. An invitation was sent to all freshmen planning to enroll for the first time. The summer program was optional.

Each student was given the opportunity to spend two and one-half days on campus. He was lodged in a University residence hall, and during the period completed the testing program given all first-year students, conferred with his faculty counselor, completed course registration and selection of classes, and paid his tuition. A charge of \$10 was made to cover the cost of lodging and meals in the residence halls. Two principal advantages are seen in this new plan by University orientation officers. The first is that it allows more time for the student's interview with his faculty counselor, and the second is that test results will be available for the counselor in his initial interview with the student.

In the fall, when orientation brings some 3,000 freshmen to the campus at once, it has not been possible to score tests fast enough for counselors to have the results at the time of their first interview with the students. Fall term orientation is being held as usual for the students who were unable to participate in the summer program. Those who came during the summer are not required to go to Ann Arbor until the second day of the registration period—September 17—at which time they will complete the portion of the orientation program which deals with student activities and social functions. The summer orientation program was conducted in the July 7-August 16 period.

SCHOLARSHIP SURVEY OF SENIORS FOR THE SCHOOL YEAR 1955 - 1956

The Division of Vocational Education of the Department of Public Instruction of the Territory of Hawaii summarizes a territory-wide scholarship survey of all high school seniors who received scholarships of one kind or another during the school year 1955-56. The survey results show that a total of 191 Hawaii public and private high school seniors in 1956 received an aggregate scholarship grant of approximately \$117,720 with the amounts ranging from \$50 for one semester to \$4,000 or more for four years of schooling. These recipients represent 3% of the 5,782 graduates included in this survey in which 36 of the 44 secondary schools submitted replies to the survey questionnaire. These 5,782 graduates included in this study represent 88% of all 1956 high school graduates in the territory. Of the 191 scholarship winners, 115 or 60% of them were girls and 76 or 40% were boys. More than half or 58% of the recipients were given scholarships on a one-year basis while 36 or 18% were granted assistance on a four-year basis. A little more than half of these winners chose local schools, while 41% chose mainland schools in 20 states scattered through 58 different institutions. Out of the 191 who were awarded scholarships, there were four who did not utilize the scholarships for various reasons.

NATION'S NEED FOR PROFESSIONAL NURSES

The need to attract more young people to a career in professional nursing and to expand nursing school facilities to train enlarging student bodies is cited

in a study by the National League for Nursing titled *Nurses for a Growing Nation*.

From a present 430,000 professional nurses—or a ratio of 258 to every 100,000 people—the nation will need 600,000 nurses by 1970 to increase the ratio to 300 for this population segment, and 700,000 nurses to raise the ratio to 350. The study assumes that the ratio should be bettered nationally in view of the many nursing positions that remain vacant, the hospital services curtailed for lack of professional nurses, and the needs to expand nursing service in public health, industry, and other fields.

If nursing continues to attract its present proportion—4%—of the growing number of college-age girls, the profession can expect to reach the 300 ratio by 1970, the study points out. However, a national goal of 350, already reached or exceeded by six states, can be attained only if some of the currently-operating trends in nursing are reversed. Among the factors that may make it possible to reach the higher goal are: (1) attracting more students to nursing than present trends anticipate, and (2) reducing the high withdrawal rate in schools of professional nursing to assure more graduates.

The extent to which the two major types of basic education programs in nursing—diploma-associate degree programs in hospital and junior colleges and baccalaureate degree programs in colleges and universities—is indicated in the study by applying educational patterns in nursing to the job responsibilities of professional nurses. Nurses who work under supervision, such as beside nurses in hospitals and doctor's office nurses, prepare in diploma and associate degree programs, the study reveals. These nurses compose 67% of the professional nurses in active nursing jobs. The remaining 33% who become head nurses, public health staff nurses, teachers, administrators, and supervisors should prepare initially in baccalaureate degree programs and the portion of these nurses who go on to top leadership positions should undertake graduate study. *Nurses for a Growing Nation* is a 36-page booklet, printed in two colors, using graphs and charts. It sells for 35¢ a copy from the National League for Nursing, Two Park Avenue, New York 16, New York.

TOMATOES IN THE ARTIC CIRCLE

Potatoes and green vegetables are produced on a large scale all over the Soviet Far North and high yields are now taken as a matter of course. The kolkhozes and sovkhozes (collective and state farms) of the Yamalo-Nenets district, the Murmansk area and the Lower Yenisei, for instance, now produce from 160 to 200 cwt. of potatoes per acre a year. But, even more surprising, remarkable results have also been achieved with vegetables that are usually associated with much warmer climates—tomatoes, cauliflower, onions, etc. The "Kirov" kolkhoze, in the district of Igarka, and the "Malenkov" kolkhoze, in the Taimir district, harvest up to 90 cwt. of leeks per acre.

Of course special protection is necessary against the icy north winds which blow in these parts, and the fields, kitchen gardens and orchards are screened by curtains of trees, hedges or snow-shields. Every year, new acres are added to the areas under cultivation, and the deserted tundra is gradually giving way to fertile green fields. Today there are more than 200 sovkhozes and auxiliary state farms in the Arctic zone of the Soviet Union, while kolkhozes in the area number many thousands. Nearly 450,000 acres of land are at present under cultivation. (UNESCO)



**General Mills invites you
to participate in
the 1957-58
Betty Crocker Search
for the American
Homemaker of Tomorrow**

Designed as an aid to both teachers and students, the Betty Crocker Search program has won praise and support from educators throughout the country. Last year, more than 300,000 young women from over 11,000 public, private and parochial high

schools participated—almost half of all the high school senior girls in America. As in past years, the National Association of Secondary-School Principals has placed this activity on the approved list of National Contests and Activities for 1957-58.

AIMS OF THE SEARCH

- To help call attention to the importance of schools in the American society
- To emphasize to students and parents alike the importance of homemaking as a career
- To help schools instill in young women an appreciation of the home
- To honor with scholarships girls best representing the qualities of a successful homemaker

REWARDS OF THE SEARCH

- 4 national scholarships (\$5,000, \$4,000, \$3,000, \$2,000) totaling \$14,000
- 2 scholarships in each state and the District of Columbia totaling \$92,000
- Complete sets of Encyclopaedia Britannica for high schools of State Homemakers of Tomorrow
- Educational tours of national historic shrines for 49 State Homemakers and their teacher advisors
- Educational aids for teachers of all subjects

HOW TO ENROLL YOUR SCHOOL

If you have not received an enrollment form and full information, please write The Betty Crocker Search, 400 Second Ave. So., Minneapolis 1, Minn. All enrollments must be postmarked by October 31, 1957.



THE PUBLIC IS INCREASING ITS DEMANDS

Administrators of the nation's 24,000 public secondary schools are confronted with increased demands by the public. Many of these are for services which have little, if any, educational implications. There are others, however, which are of great concern to the health, safety, security, and general welfare of the people.

One of these demands is for more driver education. In 44 of the states, automobile drivers may receive operator's licenses at ages ranging from 14 to 17. Auto accidents involving teen-age drivers are high. Many insurance companies reduce automobile insurance rates for owners if youth drivers have completed driver training courses. While driver training is looked upon by many as outside of the educational field, there is nevertheless a great demand for driver education in secondary schools by an ever-increasing segment of the public.

GREENLAND'S FLORA

Most people thing of Greenland as a land of ice and snow, yet five varieties of orchids are found there, and 485 species of wild flowers have been identified and recorded. A textbook just published in Denmark for use in Greenland's schools gives a number of little-known facts about flora in this region. The book contains 320 illustrations and explanations in English so that it will be useful for international botanical research. Of the species described, some 116 are of American origin, 92 European, and the rest arctic. About 20 are found only in Greenland. (UNESCO)

NATIONAL TAPE RECORDING CATALOG

The National Tape Recording Catalog, second edition (December 1956), contains information on 86 series composed of 1059 individual programs which are recorded on magnetic tape and available for re-recording for educational purposes. This catalog includes information on programs carried in the 1954 Catalog and the 1955 Supplement as well as 260 new programs made available recently. The catalog contains: an alphabetical listing with the following information on each program: Type of program, age level suitability, content description, producer, and, if any, the broadcast restrictions, presence of local "openers" and "closers," and related teaching materials; a subject index; instructions for ordering programs from the National Tape Repository; and a list of state tape recording libraries.

Masters of all the programs listed in the National Tape Recording Catalog have been deposited in a National Tape Repository at Kent State University, Kent, Ohio. Copies of any program in the National Tape Recording Catalog may be obtained from this repository. A charge of 50 cents is made for re-recording programs 15 minutes or less in length and \$1.00 for programs running from 16 to 30 minutes. The catalog may be purchased at \$1.00 each from the Department of Audio-Visual Instruction, National Education Association, 1201 Sixteenth Street, N. W., Washington 6, D. C.

SCIENCE OPPORTUNITIES

Quiz material for the secondary school classroom covering the science of steelmaking from raw materials to finished products is one aspect of the new SCIENCE IN STEELMAKING pamphlet just published by United States Steel.



90th anniversary

JOHN ROBERT GREGG

1867-1957

June 17 marked the 90th anniversary of the birth of John Robert Gregg, author and inventor of Gregg Shorthand, and perhaps the greatest shorthand genius the world has ever known.

Gregg Shorthand is taught in more than 20,000 schools of all types—high schools, colleges, universities, parochial schools, business schools. Hundreds of thousands of students learn Gregg Shorthand every year. In the minds of most people, shorthand means Gregg.

What does this mean to business and education? With the rapid expansion of our economic system, there is an ever-growing demand for *well-trained* stenographic and secretarial personnel. The materials and services of the Gregg Publishing Division enable schools to help meet the constant demand for stenographers and secretaries with *quality* training.

Gregg means more than shorthand, it means *quality* shorthand. You can be proud that your school teaches Gregg Shorthand—more than 97% of America's schools do.

GREGG PUBLISHING DIVISION

McGraw-Hill Book Company, Inc.

New York • Chicago • San Francisco • Dallas • Toronto • London

Serving Business Education Through Publishing

Designed to stimulate interest in science studies and scientific careers, the pamphlet supplies the answers to such questions as: which is hotter, red hot steel or white hot steel? How can the amount of iron in a steel plant stockpile be determined by flying over it in an airplane? How are gas and oil pipelines made to withstand tremendous pressures applied by pumping stations?

Incentives for studying science are presented to the students in the introduction to the pamphlet. It points out that employment of scientists and technologists has risen from one in every 250 industrial workers in 1900 to four in every 250 today. Within the last 75 years, continues the pamphlet, scientific research has created fifteen major new industries for this nation and fifteen million jobs. Careers in metallurgy also are given emphasis. For instance, the introduction states that nine out of ten pounds of all the metal we use are steel. Then it says that the demands of industry for special types of steel created by research have increased greatly since World War II.

The five chapters or sections in the 16-page pamphlet are comprised of five revised "Science in Steelmaking" Bulletins out of 41 issued since 1949. The five bulletins were chosen as the result of a survey of science teachers who were asked to evaluate the effectiveness of these bulletins as teaching aids for their classes. Free copies of the booklet may be obtained by writing to the Public Relations Department, U. S. Steel Corporation, 71 Broadway, New York 6, New York.

PROFESSIONAL NURSING SCHOOL ADMISSIONS DECLINE IN 1956

The number of new students entering schools of professional nursing in 1956 dropped, while admissions to schools of practical nursing remained steady, as reported by the National League for Nursing, 2 Park Avenue, New York 16, New York. Schools of professional nursing in the United States and territories in 1956 enrolled 45,839 new students, as against 46,498 the previous year. This was the first year since 1952 that admissions to these schools declined and thus failed to keep pace with the steady growth of the college age population. During this period, professional nursing schools annually have attracted about four per cent of the girls in this population age group and were expected to enroll 46,700 new students last year.

Practical nursing programs, which are usually one-year nursing courses—offered by hospitals, community agencies, and vocational schools—admitted some 15,500 new students in the academic year 1955-56, a number close to the previous year's admissions. Students graduated in 1956 from schools of professional nursing totaled 29,591; practical nursing programs prepared about 10,500. In only one type of basic nursing education program did 1956 admissions exceed those of the preceding year. This was in the college or university program offering a baccalaureate degree. These programs, which are four- to five-year college programs with a major in nursing, admitted 7,145 new students, compared with 6,985 in 1955. Although this was the smallest increase in admissions to college nursing programs in recent years, it indicates a continuation of the growing interest in college and university education for a nursing career. Diploma programs in hospitals and independent schools of nursing dropped from 38,884 new students in 1955 to 38,095 in 1956. The new associate degree nursing programs in junior and community colleges dropped from 629 new students in 1955 to 599 in 1956.

Fine Class Rings, Announcements

General Offices Owatonna, Minnesota

Josten's

Daniel C. Gainey, President
Plants and Studios



Yearbooks, Awards

Owatonna, Minnesota • Hannibal, Missouri • Santa Barbara, California

Are you Satisfied with your Vision Screening Program?

If not, the Keystone Visual-Survey Service is the answer.

It is the result of 22 years of experience and development.

The equipment is simple and compact, and the tests are open and easy to administer.



KEYSTONE Visual Survey Service

In addition to the standard service affording tests for Far and Near Usable-Vision, Lateral and Vertical Balance, Fusion, Depth Perception and Color Perception, there are the following special tests:

Visual-Survey Short Tests.....4 cards	
Preschool Test.....1 card	Ready-to-Read Tests.....3 cards
Plus-Lens Test.....1 card	Spache Reading Test.....4 cards

KEYSTONE VIEW CO., MEADVILLE, PA.

- () Please send information on Keystone Visual-Survey Service.
() Please phone or write and set time for a demonstration.

Name _____

School _____

When writing advertisers mention THE BULLETIN

GETTING ALONG WITH OTHERS

The Economic Press, Inc., Box 460, Montclair, New Jersey, has prepared a series of 10 pamphlets devoted to the subject of getting along with others. The material is simple and cleverly illustrated in color. Practical suggestions and attitudes, combined in cartoon form, make them appealing to youth. The series (10 in a set) are available at \$2 per set, with discounts on orders of 15 or more sets from the address above. Also available from the same source is a 16-page booklet entitled *Truth and Fiction About Skin Care*—humorously illustrated for family use.

KNOW YOUR SCHOOL

North Central High School, 8401 Westfield Boulevard, Indianapolis, Indiana, has prepared a 12-page booklet of information about the school for parents and other citizens of the community. The booklet tells about the senior high school and the two junior high schools in the area. The facilities of the senior high school are then described and a diagram of the school plant is included. A description of each of the 16 complete and different courses of study illustrates the provisions the school has made for many varied programs of action. Included also is a list of the different specific subjects offered—75 subjects varying from one year to 4 years in extent. A list of the subjects and the number of credits required in each for graduation, together with a list of the names of the staff members showing the subject field of each, is outlined. In a separate mimeograph form the 16 courses of studies are presented with the subjects listed by grades. Included in both publications is information about the ninth grade work, both as to requirements and electives. Also, as a part of the book, are the names of the board of education, the administrative staff of the school districts and of North Central High School, and a letter by the superintendent of schools, and one by the principal of the senior high school.

NEW SUBDIVISIONS MUST PROVIDE FOR SCHOOLS

Franklin, Wisconsin, it is reported, has passed a new city ordinance which requires builders developing new subdivisions to secure certification from the local school board that arrangements for satisfactory school facilities has been made with the board. Payment of \$500 per home to the school district by the developer "should be proof of such satisfactory arrangement."

LOAN FUND FOR STUDENTS

The Mother's Club Council of Norristown, Pennsylvania, has established a loan fund to help high-school graduates advance their education. Since the fund was established in 1929, a cumulative total of nearly \$50,000 has been loaned to 98 students. Loans are made upon the basis of need with the maximum being \$400 for a year. The loan can be renewed if the student's grades are satisfactory. Marriage while in college terminates the right to borrow.

Repayment of the loan, without interest, is expected to begin six months after completion of the training period. Mrs. Sylvan Weiss is President of the Council and Dr. George A. McCormick is Superintendent of the City Schools.

ARE THEY LEARNING TO DRIVE SAFELY?



THE MOST COMPREHENSIVE DRIVER EDUCATION TEXTBOOK

TEACHER'S MANUAL

SCHOOL PRICE—\$2.10—3rd Edition Textbook

PROJECT WORKBOOK

F. O. B. Washington, D. C., or State Depository

DRIVING GUIDES

Write for descriptive folder and prices of related materials

OBJECTIVE TESTS

American Automobile Association

— Washington 6, D. C.

GROUP TERM LIFE INSURANCE

At Low Cost

For members of the National Association of Secondary-School Principals gainfully employed by an organized system of education

YOU CAN BENEFIT from the *preferred risk classification* of your profession through the low-cost Group Life Insurance Plan of this Association.*

YOU CAN PROVIDE, in the event of your death, a cleanup fund, a fund to finance your boy's or girl's college education, or a fund to take care of that mortgage payment.

YOU INTEND to meet these obligations if you live, but will you meet them if you do not live?

Detailed information will be furnished upon request. Write to the

NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS

1201 Sixteenth Street, N. W., Washington 6, D. C.

* All teachers in secondary education are eligible to membership in the National Association of Secondary-School Principals as associate members. All associate members receive all professional services and are eligible for life insurance under the Group Life Insurance Plan of the Association if gainfully employed by an organized system of education.

TOMORROW'S SCIENTISTS

The National Science Teachers' Association (a department of the NEA) 1201 Sixteenth Street, N. W., Washington 6, D. C., publishes an 8-page (8½" x 11") magazine entitled *Tomorrow's Scientists*. It is a science publication for students in the junior and senior high schools. Last year was its initial appearance. It is authoritative, well written, and of real interest and help to students. It is published six to eight times during the school year at 50 cents per subscription.

NEW MACHINE VENDS COMPLETE MEAL

A new machine that vends a complete meal is the Lunch-O-Mat which is equipped to provide coffee, hot sandwiches, hamburgers, cold sandwiches, pastry, pies, cake, and cold drinks.

Hot sandwiches and meats are cooked by Radarange which is incorporated in the vender in addition to a refrigeration unit which refrigerates everything in the Lunch-O-Mat until the moment of service. Coffee is vended in paper hot drink cups with sugar and cream optional. The Lunch-O-Mat contains enough coffee, sugar and cream for two hundred and twenty cups.

This machine, manufactured by Eastern Electric, Inc., measures only fifty-seven inches wide by thirty-one inches deep and will vend items at any price from five to fifty cents. It can be operated on a twenty-four hours basis if the location requires it.

**Does Your Library Have a
Speech Department?**

Today's

THOUGHTS
ON
PROBLEMS
BY
AUTHORITIES

**VITAL
SPEECHES**

gives the complete text of the best
expressions of contemporary thought
at a very nominal cost.

Invaluable Debate Material

Indexed in the "Reader's Guide"

Since 1933

Issued 1st and 15th each month

One year \$7.00 Two years \$13.00

9 months \$5.50

Sample copy on request

VITAL SPEECHES

33 West 42nd Street New York 36



*The National
Honor Society*

A good Student Council project to
establish a chapter. For information
write to the

**NATIONAL ASSOCIATION OF
STUDENT COUNCILS**

1201 Sixteenth Street, N.W.
Washington 6, D. C.

IT'S HIGH TIME

A handbook for every parent of a teenager

Single copy, 50 cents

2-9 copies, 10 or more copies,
45c each 40c each

**National Association
of Secondary-School Principals**

1201 Sixteenth St., N.W., Washington 6, D. C.

DEVEREUX SERVES

"Devereux Serves—Round the Clock—
Through the Year." This is the title of a
32-page brochure recently published by
The Devereux Foundation.

The Foundation's purpose is to provide
professional men and women with a
booklet that can be placed in the hands
of troubled parents. In picture and copy
it tells parents about the home-school
units at Devereux—semi-autonomous units,
with pupils grouped by age and educa-
tional need. It shows pictures of children
living and learning in the Therapeutic
Schools, Vocational Communities, and
Remedial Camps. By presenting photo-
graphs of staff members and students of
differing ages it attempts to assist the re-
ferral agency—the general practitioner,
pediatrician, psychiatrist, consulting psy-
chologist—who wishes to ease the transfer
of the child from home to residential
school. A copy of *Devereux Serves* will be
sent on request.

Professional inquiries should be ad-
dressed to John M. Barclay, Director of
Development, or Charles J. Fowler,
Registrar, Devereux Schools, Devon, Pa.
For western states, address Joseph F.
Smith, Superintendent, or Keith A. Seaton,
Registrar, Devereux Schools, Santa
Barbara, Calif.

**DEVEREUX
SCHOOLS**

UNDER THE DEVEREUX FOUNDATION
HELENA T. DEVEREUX, Director

Professional Associate Directors

Robert L. Bridgen, Ph.D. Edward L. French, Ph.D.
Michael B. Dunn, Ph.D. J. Clifford Scott, M.D.

SANTA BARBARA
CALIFORNIA

DEVON
PENNSYLVANIA


ONE
OF
THE
NASSP
CONVENTION'S
OUTSTANDING FEATURES



THE EXHIBITS

YOU CAN'T AFFORD TO MISS
SEEING THE LATEST IN

- INSTRUCTIONAL MATERIAL
 - AUDIO-VISUAL AIDS
 - SCHOOL EQUIPMENT
 - GRADUATION SUPPLIES
 - SCHOOL JEWELRY
 - OFFICE EQUIPMENT



February 15-19, 1958
Claypool and Sheraton-Lincoln Hotels
Indianapolis, Indiana

WILL YOU RESPOND?

DURING any given school year your association receives hundreds of letters making inquiries for information concerning a great variety of subjects that pertain to the secondary school. In many instances these letters request information as to specific schools that are trying to solve certain problems or are giving attention to specific activities. Included in these letters are requests for information about such areas as follows:

1. Career day or senior day
2. High schools that have no study halls (or study periods)
3. High-school buildings very economically constructed with little handicap to the school program of studies
4. High schools offering courses in journalism
5. Various methods of developing the master class schedule
6. Drop-out studies
7. Solving the smoking problem of the pupil and faculty
8. Approximate cost for a student to attend high school
9. Methods of grouping pupils
10. High schools that present different types of diplomas to their graduates
11. High schools that offer no algebra below the tenth grade
12. High schools that offer no Latin below the tenth grade
13. High schools that have developed criteria for the selection of textbooks
14. Special classes for the improvement of reading
15. School sportsmanship code
16. Have a balanced program of home work so that no pupils have heavy assignments some nights and none other nights
17. What percentage of graduates are married 90 days after graduation, Boys, Girls, Total
18. Junior high schools that have developed evaluative criteria

If your school participates in one or more of these areas, would you please write a brief description of each (include pupil enrollment of your high school) and mail it to the address below? We assure you that your response will be appreciated.

NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS
1201 SIXTEENTH STREET, N. W.
WASHINGTON 6, D. C.

THE 1957 COMMENCEMENT MANUAL

ARE you looking for suggestions in developing your Commencement Program? If so, this new manual of 224 pages contains a wealth of material of assistance in presenting not only ideas but also actual scripts and programs used by specific junior and senior high schools during their graduation exercises. Also included are a report of trends in junior and senior high-school commencements and descriptions of various practices.

Here is a book that offers you real help in the development of your commencement programs over the years. Order your copy at \$1.50 from

THE NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS

1201 Sixteenth Street, N. W.,

Washington 6, D. C.

Payment must accompany orders for less than 2 copies.

BALTOTYPE

Manufacturers and Designers of

**TYPE · HANDY BOXES · in Fonts · Sorts
Rules · Spacing Material · Ornaments**

MORE and more schools throughout the country are using BALTOTYPE in their print shops. We manufacture all the popular type faces that are used for teaching printing today.

WHY don't you or your printing instructor look into the possibilities we offer for your school shop.

WRITE today to Dept. BU-1, requesting FREE catalogs and literature of our complete line.

Baltimore Type & Composition Corporation
15-17 South Frederick Street · Baltimore 2, Maryland

For Your Information

The first part of the February 1956 issue of THE BULLETIN, entitled *What Should We Expect of Education?* by Dr. Homer T. Rosenberger, is also available in book form with hardbound covers.

We thought so well of it that we have the impression that many of our members would want a hardbound copy for their library in addition to the regular copy of THE BULLETIN. We are now filling orders for this book. We shall be glad to receive your order.

Since the book will be of interest to lay people and school board members, you may want to inform them of its availability or you may personally want to present them with copies.

We would also appreciate it if you would write a review of the book and have it published in your local daily or weekly newspaper. Will you do this for your Association? It is a good way to bring your patrons up to date on what a good school system should do.

Price, \$3.00 each, net.

Order from:

The National Association of Secondary-School Principals

1201 Sixteenth St., N. W.

Washington 6, D. C.

HOW DEMOCRATIC IS THE ADMINISTRATION OF YOUR SCHOOL?

- It is generally agreed that a school is not completely democratically administered unless it has some form of student participation in school administration.

DO YOU HAVE A STUDENT COUNCIL IN YOUR SCHOOL?

- The National Association of Student Councils of the National Association of Secondary-School Principals maintains an office in Washington, D. C., which is equipped to assist you in organizing a student council.
- Numerous other services are also available which will help make your student council an effective influence for good in your school.

ENROLL YOUR SCHOOL NOW FOR 1957-58 MEMBERSHIP

Fill out the membership application blank in this issue of THE BULLETIN and mail it with the fee for a school your size to:

THE NATIONAL ASSOCIATION OF STUDENT COUNCILS

1201 Sixteenth Street, N. W.
Washington 6, D. C.

ATTENTION! STUDENT COUNCILS

*Enroll now in the National Association of
Student Councils
for the School Year 1957-58*

**The National Association of Student Councils
of the
National Association of Secondary-School Principals
1201 Sixteenth Street, N.W.
Washington 6, D. C.**

APPLICATION FOR MEMBERSHIP

The Student Council of.....
Name of School

Address*.....
Street City or Town Zone State

Sponsor of Student Council.....

The National Association of Student Councils serves the student councils of the nation through advisory and consultative service, distribution of printed material, field service, and as a clearinghouse of student projects and activities. New members receive two handbooks: *The Student Council in the Secondary School* and the *1957 Student Council Yearbook*, and two copies a month of *Student Life*, a 32-page, illustrated magazine of student activities. Annual rates of membership are based on size of school enrollment:

L (large)—1,000 or larger.....	\$6.00
M (medium)—300 to 999.....	5.00
S (small)—less than 300.....	4.00

Enroll now and membership will be paid until June 30, 1958.

High School enrollment this year.....

Amount of membership fee enclosed.....

Date.....Principal.....

*Two copies of *Student Life* will be sent monthly to this address, eight times (October-May) during the school year. Enroll now.

The Twenty-first Annual National Conference of Members of the National Association of Student Councils will be held in the Roswell High School, Roswell, New Mexico, June 23-27, 1957.

it's **HIGH** TIME^{*}



***** GUIDE FOR PARENTS OF HIGH SCHOOL STUDENTS

*Every
Parent
in
Your Town
Should Have
This Book*

It's High Time describes how adolescents grow; how (and why) teenage fads sweep the town; how mothers and dads can help you and your friends set up workable rules for curfews, dating, home chores, use of the car

It's High Time shows how parents can work with the high-school principal and teachers to help you and your friends decide on courses of study, select a vocation, pick helpful extraclass activities, establish good study habits, and handle extra expenses

It's High Time was published by:

National Association of Secondary-School Principals
National School Public Relations Association
Departments of the National Education Association
and
National Congress of Parents and Teachers

Single copy, 50c 2-9 copies, 45c each 10 or more copies, 40c each

Orders of \$2.00 or less must be accompanied by payment.

When writing advertisers mention THE BULLETIN

Membership Secretaries of State High-School Principals Organizations

AFFILIATED WITH THE NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS

- Alabama Association of Secondary-School Principals (*White*)—*Frank N. Philpot*, Director
Division Secondary Education, State Department of Education, Montgomery, Alabama
- Alabama Association of High-School Principals (*Colored*)—*James W. Jenkins*, Principal,
Russell County High School, Hurtsboro, Alabama.
- Arizona Association of Secondary-School Principals—*Peyton Reavis*, Assistant Principal,
Amphitheatre High School, Tucson, Arizona.
- Arkansas School Administrators Association (*Colored*)—*E. H. Hunter*, Principal, Scipio A.
Jones High School, Cedar at 10th Street, North Little Rock, Arkansas.
- Arkansas Association of Secondary-School Principals (*White*)—*Frank L. Williams*, Principal,
Junior High School, Hot Springs, Arkansas.
- California Association of Secondary-School Administrators—*William N. McGowan*, 2220
Bancroft Way, Berkeley 2, California.
- Colorado Association of Secondary-School Administrators—*Maurice W. Jessup*, Heath
Junior High School, Greeley, Colorado.
- Connecticut Association of Secondary-Schools—*Thomas Skirm*, Principal, Wethersfield High
School, Wethersfield, Connecticut.
- Delaware Association of School Administrators—*Lewis J. Rousbey*, Assistant Principal, High
School, Middletown, Delaware.
- District of Columbia Association of Secondary-School Principals—*Boise L. Bristol*, Board
of Education, Ross Administration Annex No. 1, Washington 9, D. C.
- Department of Secondary-School Principals, Florida State Teachers Association (*Colored*)—
Mrs. Florine Abel, Principal, Bradenton Elementary High School, Bradenton, Florida.
- Florida Association of Secondary-School Principals—*E. B. Henderson*, Secretary-Treasurer,
Florida Education Association, 208 West Pensacola Street, Tallahassee, Florida.
- Georgia High-School Principals Association—*George M. McCord*, Principal, Murphy High
School, 256 Clifton Street, S. E., Atlanta, Georgia.
- Hawaii Association of Secondary-School Principals—*Frank Kinnison*, Principal Lahainaluna
Technical High School, P. O. Box 7, Lahaina, Maui, Hawaii.
- Idaho Association of Secondary-School Principals—*Reid Bishop*, Principal, High School,
Parma, Idaho.
- Illinois Secondary-School Principals Association—*H. A. Dollahan*, Principal, Lawrenceville
Township High School, Lawrenceville, Illinois.
- Indiana Association of Secondary-School Principals—*O. L. Van Horn*, 1083 Churchman
Avenue, Beech Grove, Indiana.
- Iowa Association of Secondary-School Principals—*Delmer H. Battrick*, Principal, Roosevelt
High School, 45th and Center Streets, Des Moines 12, Iowa.
- Kansas Association of Secondary Schools and Principals—*Glenn E. Burnette*, Principal, Junior
High School, Manhattan, Kansas.
- Kentucky Association of Secondary-School Principals—*James M. Deacon*, Principal, Lexington
Junior High School, 4th and Limestone Streets, Lexington, Kentucky.
- Louisiana Principals Association—*W. W. Williams*, Principal, High School, Minden,
Louisiana.
- Louisiana Association of High School Principals (*Colored*)—*E. C. Land*, Principal, Lowery
High School, Donaldsonville, Louisiana.
- Maine State Principals Association—*Philip A. Annas*, Dept. of Education, State House,
Augusta, Maine.
- Maryland Secondary-School Principals Association (*White*)—*Douglas M. Bivens*, Supervisor
of Senior High Schools, Board of Education, Hagerstown, Maryland.
- Maryland Society of Educational Pioneers (*Colored*)—*Ulysses S. Young*, Dean of Instruction,
State Teachers College, Bowie, Maryland.
- Massachusetts Secondary-School Principals Association—*Frederick H. Pierce*, Executive
Secretary, 3 Broadway, Beverly, Massachusetts.
- Massachusetts Junior High-School Principals Association—*Harry Finkelstein*, Principal,
Garfield Junior High School, Revere, Massachusetts.
- Michigan Secondary-School Association—*E. Dale Kennedy*, Executive Secretary, M.O. Box
480, Lansing 2, Michigan.
- Minnesota Association of Secondary-School Principals—*William F. Carlson*, Junior-Senior
High School, Northfield, Minnesota.

- Mississippi Association of Secondary-School Principals—*John A. Johnson*, Principal, East Forrest High School, Box 87, Petal, Mississippi.
- Missouri Association of Secondary-School Principals—*Kenneth J. Smith*, Principal, Senior High School, Kirksville, Missouri.
- Montana Association of School Administrators—*A. Ray Collins, Jr.*, Principal Sweet Grass County High School, Big Timber, Montana.
- Nebraska Association of School Administrators—*Merle A. Stoneman*, Teachers College 125 University of Nebraska, Lincoln 8, Nebraska.
- New Hampshire Secondary-School Principals Association—*Irvin H. Gordon*, Principal, High School, Marlboro, New Hampshire.
- New Jersey Secondary-School Principals Association—*Charles W. Mintzer*, Principal, High School, Fair Lawn, New Jersey.
- New Mexico Secondary-School Principals Association—*S. H. Moseley*, Principal, Union High School, Las Cruces, New Mexico.
- New York State Association of Secondary-School Principals—*John H. Fuller*, Principal, Floral Park Memorial High School, Floral Park, New York.
- New York City High-School Principals Association—*Vincent McGarrett*, Principal, High School of Commerce, New York, New York.
- New York City Junior High-School Principals Association—*Carl Cherkis*, Principal, Baruch Junior High School, 104 Man., 330 East 21st Street, New York 10, New York.
- New York City Vocational High-School Principals Association—*Edward N. Wallen*, Principal, East New York Vocational High School, 1 Wells Street, Brooklyn 8, New York.
- North Carolina Division of Principals of the NCEA—*C. E. Wike*, Principal, High School, Lexington, North Carolina.
- North Dakota Principals Association—*Joel A. Davy*, Principal, Senior High School, Minot, North Dakota.
- Ohio High-School Principals Association—*Robert G. Winter*, Principal, Piqua Central High School, Piqua, Ohio.
- Oklahoma Secondary-School Principals Association—*J. Frank Malone*, Principal, Northwest Classen High School, 2801 N.W. 27th & May Sts., Oklahoma City 27, Oklahoma.
- Oregon Association of Secondary-School Principals—*Willard Bear*, Supervisor of Secondary Education, State Department of Education, State Library Building, Salem, Oregon.
- Pennsylvania Association of Secondary-School Principals—*S. P. Bomgardner*, Principal, High School, New Cumberland, Pennsylvania.
- Rhode Island Secondary-School Principals Association—*Eldon D. Wedlock*, Principal, Scituate Junior-Senior High School, Trimtown Road, North Scituate, Rhode Island.
- South Carolina Association of Secondary-School Principals (*White*)—*George I. Pair, Jr.*, Principal, Brookland-Cayce Junior High School, West Columbia, South Carolina.
- South Carolina High-School Principals Association (*Colored*)—*C. C. Woodson*, Principal, Carver High School, Spartanburg, South Carolina.
- South Dakota Association of Secondary-School Principals—*George W. Janke*, Principal, Senior High School, 410 East 5th Avenue, Mitchell, South Dakota.
- Tennessee Association of Secondary-School Principals—*Howard G. Kirksey*, Dean of Instruction, Middle Tennessee State College, Murfreesboro, Tennessee.
- Texas Association of Secondary-School Principals—*W. I. Stevenson*, Principal, Milby Senior High School, Houston, Texas.
- Texas Principals Association (*Colored*)—*Odis Turner*, Principal, Dansby High School, Kilgore, Texas.
- Utah Secondary-School Principals Association—*Wilburn N. Ball*, Director of Secondary Education, 223 State Capital, Salt Lake City, Utah.
- Vermont Headmasters Association—*T. J. Whalen*, Principal, High School, Brandon, Vermont.
- Virginia Department of Secondary-School Principals (*White*)—*Clarence H. Spain*, Principal, Binford Junior High School, 1701 Floyd Avenue, Richmond 20, Virginia.
- Virginia Teachers Association (*Colored*)—*J. F. Banks*, Principal, Christiansburg Institute, Cambria, Virginia.
- Washington Association of Secondary-School Principals—*George Hermes*, Principal, Irene S. Reed High School, 7th and Alder, Shelton, Washington.
- West Virginia Secondary-School Principals' Commission (*White*)—*R. V. Braham*, Principal, Lincoln Junior High School, Charleston, West Virginia.
- Wisconsin Association of Secondary-School Principals—*Harold L. Paukert*, Supervising Principal, Kohler Public Schools, 230 School Street, Kohler, Wisconsin.
- Wyoming Association of Secondary-School Principals—*Merritt B. Jensen*, Principal, High School, Cheyenne, Wyoming.

NATIONAL ASSOCIATION OF
SECONDARY-SCHOOL PRINCIPALS

NATIONAL EDUCATION ASSOCIATION
1957-58

OFFICERS

- President:* R. B. NORMAN
Principal, Amarillo High School, Amarillo, Texas
First Vice President: GEORGE E. SHATTUCK
Principal, Norwich Free Academy, Norwich, Connecticut
Second Vice President: CLIFF ROBINSON
Director of Secondary Education, Eugene Public Schools, Eugene, Oregon
Executive Secretary: PAUL E. ELICKER
1201 Sixteenth Street, N. W., Washington 6, D. C.

EXECUTIVE COMMITTEE

All officers and the following additional members:

- GEORGE L. CLELAND
Secondary-School Consultant, State Department of Education, Topeka, Kansas
JAMES D. LOGSDON
Superintendent, Thornton Township High School and Junior College, Harvey, Illinois
JAMES E. NANCARROW
Principal, Upper Darby High School, Upper Darby, Pennsylvania
EUGENE S. THOMAS
Principal, Central High School, Kalamazoo, Michigan

NATIONAL COUNCIL OF THE NATIONAL HONOR SOCIETY

- FRANK A. PEAKE, *Chairman*
Principal, Shades Valley High School, Birmingham, Alabama
ROBERT L. FOOSE
Principal, Westfield Senior High School, Westfield, New Jersey
RICHARD F. GOOS
Principal, Roosevelt Junior High School, Hamilton, Ohio
FLOYD HONEY
Principal, Monterey High School, Lubbock, Texas
HOWARD F. HORNER
Principal, David Douglas High School, Portland, Oregon
GEORGE W. JANKE
Principal, Mitchell High School, Mitchell, South Dakota
SISTER MARY KILLEEN, O.P.
Principal, Edgewood High School of the Sacred Heart, Madison, Wisconsin
HOWARD B. TINGLEY
Principal, Petaluma Junior High School, Petaluma, California
CARLETON L. WIGGIN
Principal, Deering High School, Portland, Maine
PAUL E. ELICKER, *Secretary*

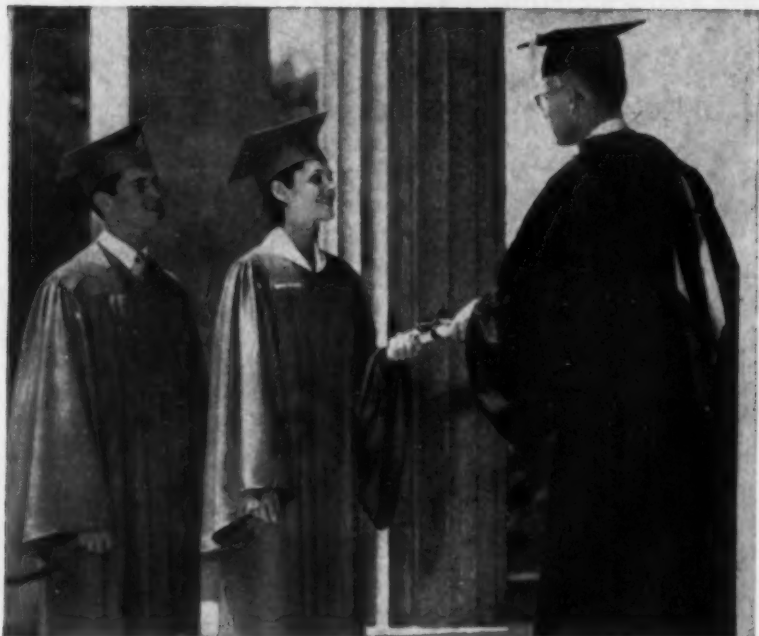
Issued Nine Times a Year

\$8.00 a Year

\$1.50, Postpaid

Monthly, September to May Inclusive

Published at Washington, D. C., by the National Association of Secondary-School Principals of the National Education Association,
1201 Sixteenth Street, N. W., Washington 6, D. C.



*New, Miracle Fabrics by MOORE
in Caps, Gowns and Hoods*

SALES OR RENTALS

New Cap and Gown stocks in beautiful colors, airy light . . . a new high in appeal and comfort. Ask for Swatch Catalog **CG13**.

E. R. MOORE CO.

932 Dakin St. • Chicago 13, Ill. • Phone GRaceland 7-3600
268 Norman Ave. • Brooklyn 22, N. Y. • Phone EVergreen 3-2801

MOORE OF CALIFORNIA

1641 N. Allesandro St. • Los Angeles 26, Calif. • Phone DUnkirk 7-3205

Also Makers of Gymsuits for Girls ★ Robes for Choirs

When writing advertisers mention THE BULLETIN